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The Demand and Price Situation for Forest Products

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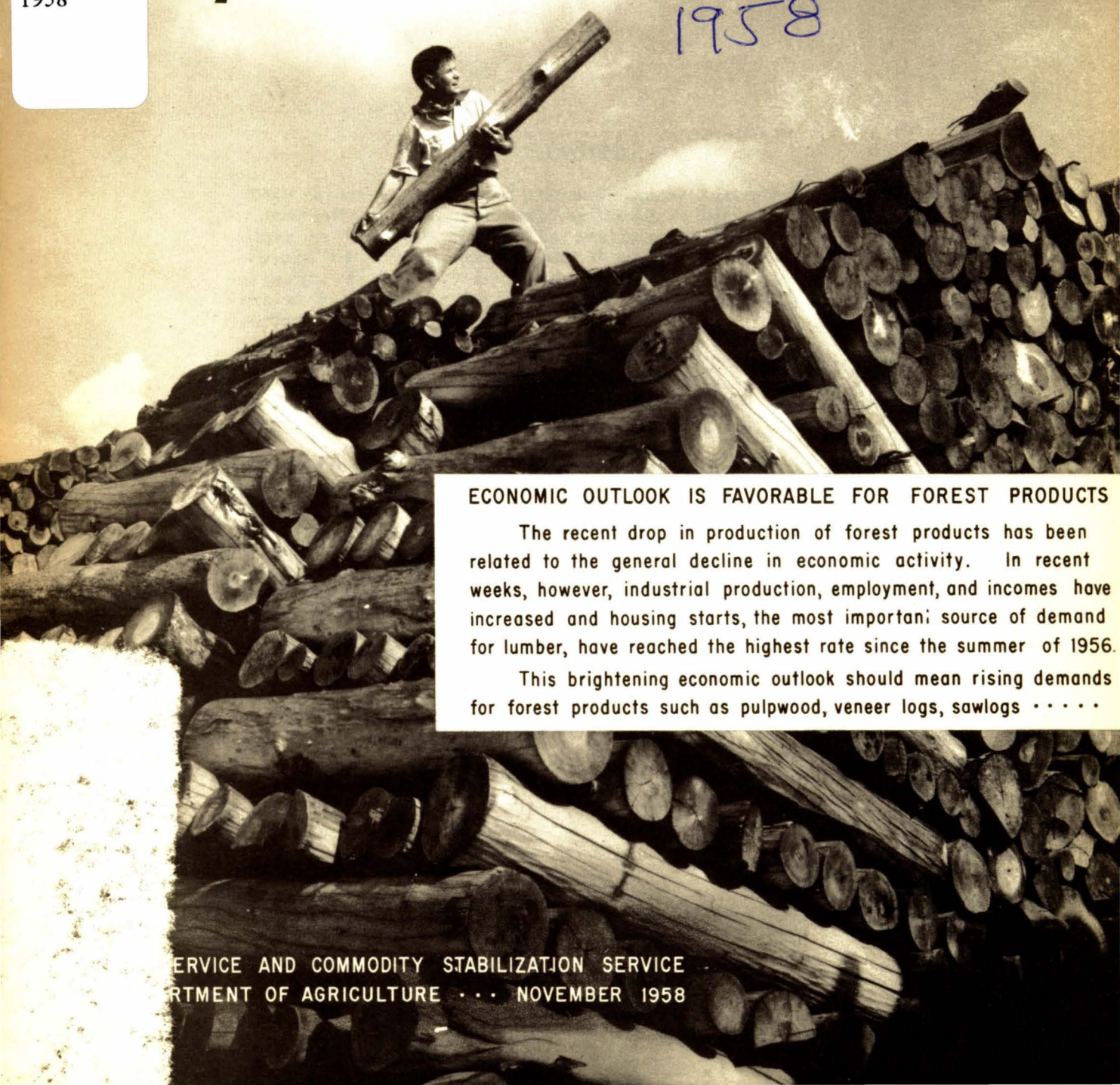

ECONOMIC OUTLOOK IS FAVORABLE FOR FOREST PRODUCTS

The recent drop in production of forest products has been related to the general decline in economic activity. In recent weeks, however, industrial production, employment, and incomes have increased and housing starts, the most important source of demand for lumber, have reached the highest rate since the summer of 1956.

This brightening economic outlook should mean rising demands for forest products such as pulpwood, veneer logs, sawlogs · · · · ·

ERVICE AND COMMODITY STABILIZATION SERVICE
RTMENT OF AGRICULTURE · · · NOVEMBER 1958

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FOREWORD

This report was prepared primarily as background information for the Outlook Conference held by the U. S. Department of Agriculture in November 1958. The analysis of timber products was prepared by Dwight Hair in the Division of Forest Economics Research, Forest Service, and the analysis of naval stores by Herbert B. Wagner in the Tobacco Division, Commodity Stabilization Service.

Much of the information on prices was taken from price reports published by individual States. These reports along with other reports containing information on prices or production of forest products are listed under "Literature Cited" page 18.

The brief analysis of the outlook for timber products in 1975 and 2000 is based on assumptions concerning population trends, gross national product, and other related factors contained in a separate "Future Demand for Timber" from the comprehensive report "Timber Resources for America's Future" published by the Forest Service in 1958 (19, 21).[1] Copies of this separate are available upon request from the U. S. Department of Agriculture, Forest Service, Washington 25, D. C.

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[1]Numbers in parentheses refer to Literature Cited, p. 18.

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CONTENTS

	Page
Introduction	v
The demand and price outlook for stumpage	1
Demand for industrial roundwood declines in 1957 and 1958	1
Stumpage prices decline more than production	1
Declines in demand and prices reflect drop in economic activity	2
Economic outlook is favorable for industrial roundwood products	2
The demand and price outlook for saw logs and lumber	3
Production shows some decline in 1958	3
More than half the saw log volume produced now cut in the West	3
Saw-log price quotations show little change	5
Decline in demand for saw logs reflects drop in economic activity and substitution	5
Some increase in demand expected in the period immediately ahead	6
Looking further ahead substantial increases expected	7
The demand and price outlook for pulpwood	7
Pulpwood production shows some decline in 1957 and 1958	7
Softwoods preferred for pulpwood	8
Pulpwood production concentrated in the South	8
Pulpwood prices show little change since 1956	8
Decline in demand for pulpwood believed temporary	9
The demand and price outlook for veneer logs	9
Veneer log production shows little change since 1955	9
Veneer log price quotations also show little change	10
Demand likely to increase for both softwood and hardwood veneer logs	11
The demand and price outlook for other roundwood products	11
Production of other industrial roundwood products shows variable trends--prices vary widely	11
Consumption of Christmas trees rising slowly	12
Outlook summary	15
Literature cited	18
Appendix	21

INTRODUCTION

The purpose of this report is to present information on current trends in the demand and price situation for forest products. Major emphasis is placed on national trends in demand and prices and the general economic indicators such as construction which determine what future demand and prices are likely to be.

Forest products comprise an important source of income for forest landowners as well as forest industries and labor in the United States. In 1954, for example, the stumpage value of the timber cut amounted to an estimated 1 billion dollars. A substantial part of this sum was distributed to the 4.5 million small forest ownerships which collectively contain more than half of all the commercial forest land in the country.

The value of saw logs, pulpwood, and other round timber products, as well as Christmas trees, pine gum, and maple sap at local points of delivery, amounted to an estimated 2.5 billion dollars (table 1). This market value equalled about 13 percent of the local market value of all farm crops harvested, was about equal to the value of cotton harvested, and was about 30 percent greater than the value of the wheat harvested (fig. 1). Corn was the only farm crop which substantially exceeded forest products in terms of local market value.

The relative importance of these forest products compared with farm crops harvested varied widely among States as shown in table 1. In New Hampshire and Oregon the local market value of forest products harvested was greater than the value of farm crops harvested. In many other States it was greater than the value of the most important crop harvested.

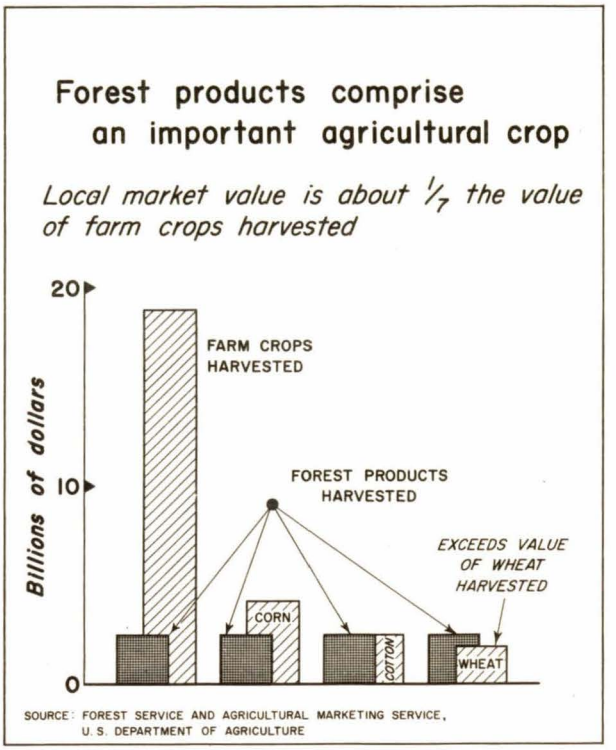

Figure 1

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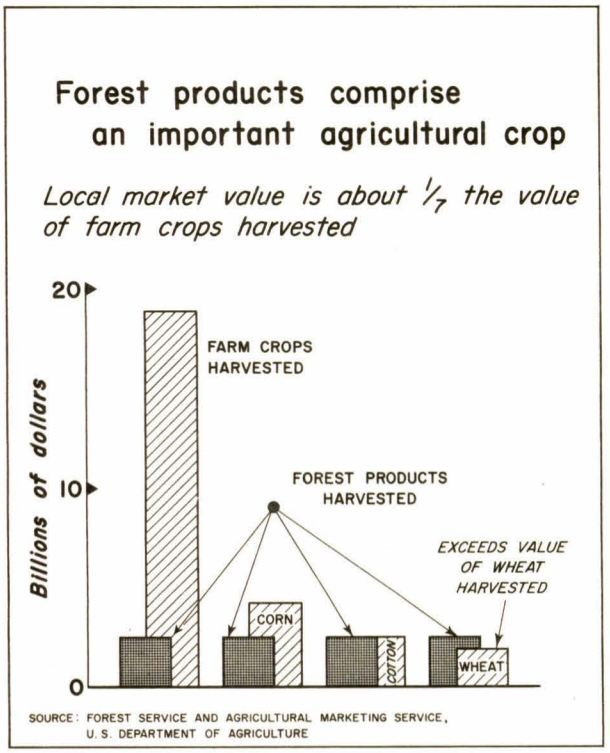

Figure 1

THE DEMAND AND PRICE OUTLOOK FOR STUMPAGE

Demand for industrial roundwood declines in 1957 and 1958

The volume of industrial roundwood (all round products except fuelwood) produced in the United States in 1958 is estimated at 8.6 billion cubic feet. This is about 2 percent less than estimated production in 1957 and 10 percent below production in 1956 (table 2, fig. 2). Saw logs account for 59 percent of the estimated output in 1958, pulpwood 26 percent, veneer logs 7 percent, and miscellaneous products such as cooperage logs and bolts, mine timbers, and poles and piling the remaining 8 percent.

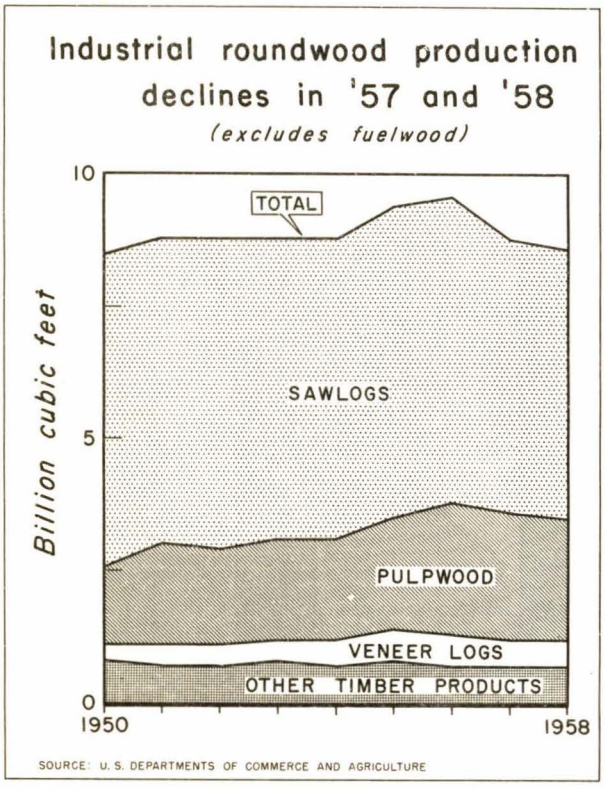

Figure 2

The decline in production of industrial roundwood in 1957 and 1958 reflects a sharp drop in the demand for saw logs, a modest drop in the demand for pulpwood and miscellaneous products, and a leveling off in the demand for veneer logs and bolts. Most of the decline in production occurred in 1957.

Consumption of industrial roundwood in the period 1956-58 declined only 8 percent compared to the 10 percent decrease in production (table 2). This reflects the use of stocks of lumber, pulpwood, paper and board, etc., and imports from other countries. Imports although showing some decline were fairly well maintained for most products in 1957 and 1958.

Imports have supplied an increasing proportion of the industrial roundwood used in the United States. Since 1915, when this country first became a net wood-importing nation, net imports of roundwood[2] have increased from 130 million cubic feet to the present level of about 1.2 billion cubic feet. Currently imports, largely from Canada, account for about 12 percent of all the industrial roundwood consumed.

Stumpage prices decline more than production

National forest stumpage prices dropped in 1957 and the first two quarters of 1958 and currently average considerably below prices received during 1956 (table 3, fig. 3). The price received from sales of Douglas-fir stumpage, for example, dropped from an average of $37.70 per thousand board-feet in 1956 to $20.60 per thousand in the second quarter of 1958--a decline of about 45 percent. The prices received from sales of sugar pine and ponderosa pine showed a somewhat similar decline. On the other hand, the average stumpage prices received from sales of southern pine fell only from $37.40 per thousand board-feet during 1956 to $30.65 during the second quarter of 1958.

While these prices are based on national-forest timber sales, fragmentary data in a number of regions suggests that prices of comparable private stumpage have followed a similar trend. Prices of public timber, however, do not necessarily indicate prices for private timber.

Currently nine States publish at varying intervals reports containing information on private stumpage prices (1, 3, 4, 6, 8, 11, 12, 32, 33). The degree of detail in these reports varies from State to State. In general the reported prices are based on timber-buyers quotations, and are usually presented as a range of prices per thousand

[2] Including the roundwood equivalent of lumber, veneer, plywood, woodpulp, paper and board.

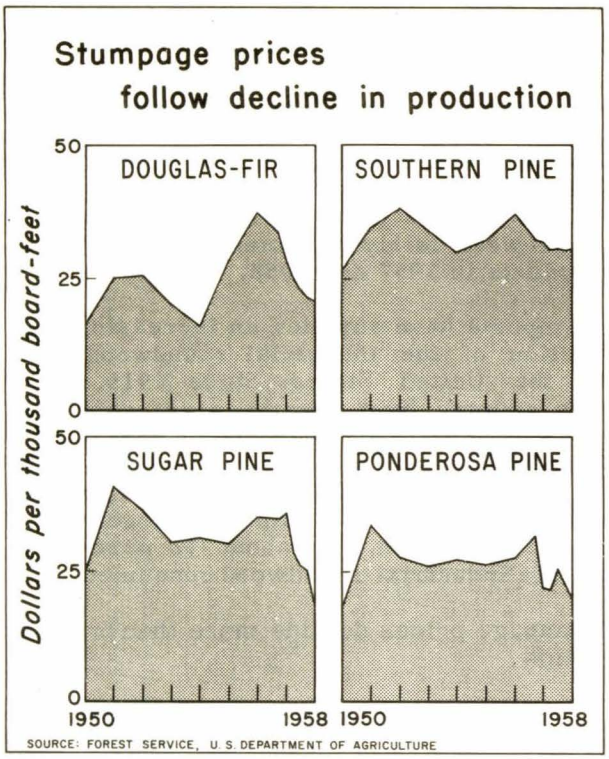

Figure 3

board-feet and/or average prices, without specifications as to grade, log rule, other value factors or sampling accuracy. Illustrative stumpage prices taken from some of the State reports published in 1958 are shown in the tabulation below:

Species:	*State and source*	*Price of stumpage per thousand bd.-ft.*
Southern pine:	Louisiana (6)	
Saw-log timber		$25.00 - 35.00
Pulpwood timber		8.20
Gums	Louisiana (6)	7.00 - 12.00
White oak veneer stumpage	Illinois (4)	12.00 - 80.00
Hard maple	Wisconsin (33)	20.00 - 40.00
Yellow birch	Wisconsin (33)	25.00 - 55.00

Stumpage prices received for individual timber sales, whether public or private, vary with species, quality, logging and processing costs, marketing practices, and market conditions.

Declines in demand and prices reflect drop in economic activity

The declines in the production of industrial roundwood and in stumpage prices were rather directly related to declines in economic activity. From September 1957 to March 1958, gross national product dropped from an annual rate of $445.6 billion dollars to $425.8 billion dollars (26) (fig. 4). From August 1957 through April 1958, industrial production contracted by about 13 percent and nonagricultural employment declined about 5 percent (2, 28).

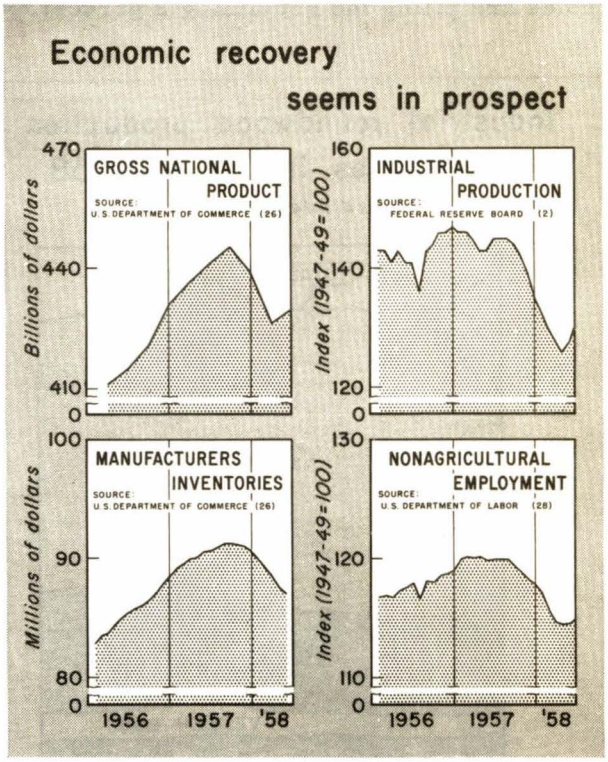

Figure 4

During this same period, manufacturing and trade inventories also dropped (26). The result of these and other similar changes was to reduce the demand for lumber, veneer and plywood, woodpulp, paper and board, and other wood products.

Economic outlook is favorable for industrial roundwood products

In recent weeks, the decline in economic activity has been reversed and industrial production, employment, and gross national

product have increased slightly (fig. 4). Additional factors favorable to recovery include an easier credit situation, lower interest rates, and a fairly stable trend in wholesale and retail prices. And finally, housing starts, the most important source of demand for lumber, reached a seasonally adjusted annual rate of about 1.2 million units in July--the highest rate since the summer of 1956 (27). This brightening economic outlook should mean a rising demand for industrial roundwood products.

The Forest Service has recently taken a long look ahead at the prospects for timber markets in view of expected trends in population growth, increases in gross national product, and other related factors (19). Projections indicate that by 1975 potential demands for industrial roundwood may be 30 to 50 percent above consumption in 1952.

The long-range demand outlook points to future timber supply problems and increased stumpage values, particularly for preferred softwoods and high-quality timber. From the standpoint of forest landowners, this means better market opportunities, higher prices, and more favorable opportunities to practice forestry. From the standpoint of the public and forest industries this appraisal emphasizes the need for a major strengthening of forestry efforts in the United States, particularly on small forest ownerships in the hands of farmers and other miscellaneous private owners.

THE DEMAND AND PRICE OUTLOOK FOR SAW LOGS AND LUMBER

Production shows some decline in 1958

The volume of saw logs and lumber produced in the United States in 1958 is estimated at 33.0 billion board-feet[3]--about 2 percent less than in 1957, and 12 percent less than in 1956 (table 4, fig. 5).

Domestic saw log production is the source of most of the lumber consumed in the United States. In the period 1953 through 1957, estimated domestic lumber production averaged 36.4 billion board-feet compared with average imports of 3.2 billion board-feet and average exports of 0.7 billion board-feet. Softwood lumber from Canada has made up most of the lumber imports. Hardwood lumber from tropical countries, while highly important for some special uses, accounted for only a small part of lumber imports.

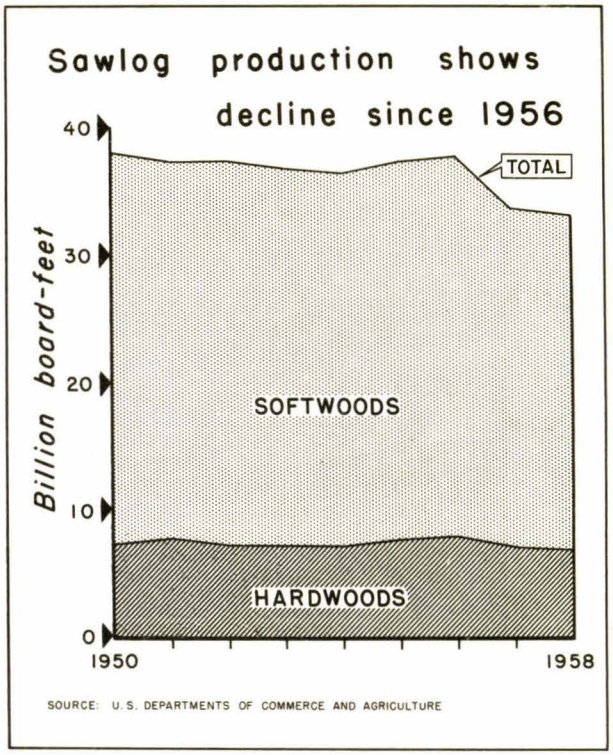

Figure 5

More than half the saw log volume produced now cut in the West

Domestic saw log and lumber production is concentrated in the West[4] where an estimated 17.8 billion board-feet of lumber was produced in 1958 (table 5, fig. 6). This represents over half of all lumber and two-thirds of the softwood lumber produced in the United States. The three Pacific Coast States--Oregon, Washington, and California--account for about 80 percent of the lumber produced in the West and 45 percent of total production in the country. Oregon is the Nation's leading lumber producing State.

[3] Estimates for 1957 and 1958 are based on data published by the National Lumber Manufacturers Association (9, 10).

[4] The West includes the 11 western States and South Dakota. The South consists of the 12 most southern States, including Virginia. The North includes the remaining 24 States.

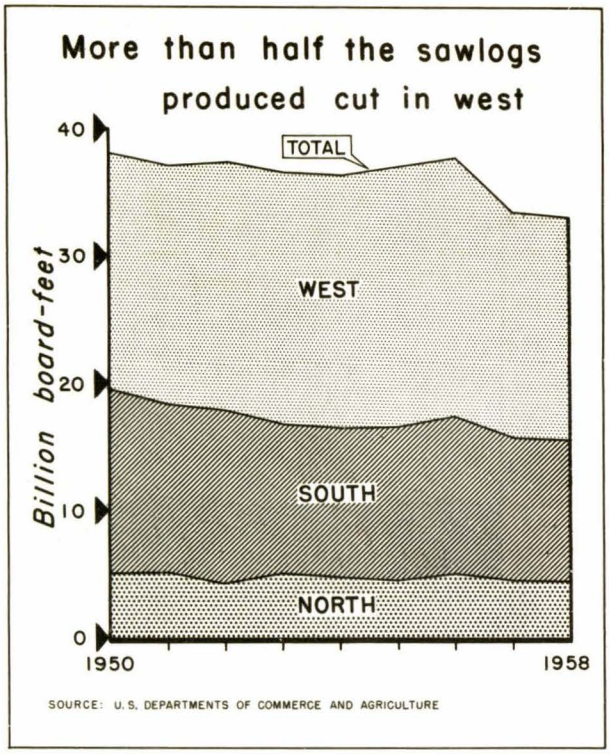

Figure 6

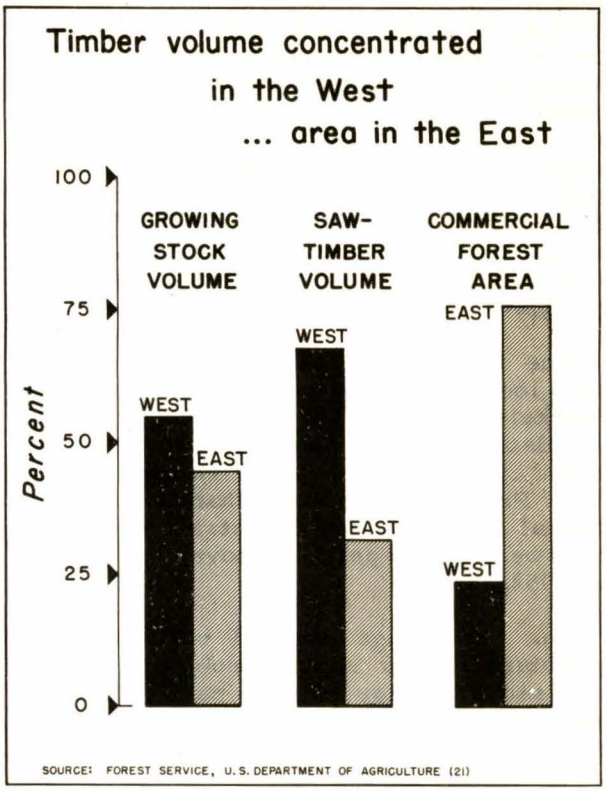

Figure 7

The West is expected to continue to be the most important region in lumber production for some time to come, largely because this region contains about 1,345 billion board-feet of sawtimber or two-thirds of the Nation's present supply (fig. 7). This region has 80 percent of the country's softwood volume, most of which is old-growth sawtimber of relatively high quality. Commercial forest lands in the West, however, make up only 24 percent of the timber-growing acreage in the country.

The South in 1958 produced an estimated 10.8 billion board-feet of lumber or about 33 percent of total production in the country. There has been no marked trend in lumber production in the South since 1940, although production in 1957 and 1958 was somewhat below the average for this period and softwood lumber cut has declined slightly in relative importance while hardwood lumber production has increased. In 1954, six southern States--North Carolina, Georgia, Alabama, Virginia, Arkansas, and Mississippi--each produced more than a billion board-feet of lumber.

The South contains about 40 percent of the Nation's commercial forest land, although it has only 22 percent of the Nation's present growing stock and 17 percent of the sawtimber. Growth rates are high, logging conditions are relatively easy, year-round woods employment is possible, and labor supplies are relatively abundant. Market location is also highly favorable with relatively short distances to the great industrial centers in the North and Midwest.

Lumber production in the North in 1958 is estimated at 4.4 billion board-feet, or slightly below the average for the past 15 years. Pennsylvania, Maine, New York, Michigan, and Wisconsin are the leading lumber producing States in the North. The North contains 36 percent of the Nation's commercial forest land, but only 22 percent of the growing stock and 13 percent of the sawtimber, mainly hardwoods. Timber growth in 1952 exceeded cut, but average timber quality is low and growth is far below potential yields.

Softwoods chiefly Douglas-fir, southern pine, Ponderosa pine, western true firs

and hemlock are expected to account for about 80 percent of all saw logs and lumber produced in 1958. Softwoods comprise about 90 percent of the lumber used in construction, the major end use of lumber, and about 70 percent of the lumber used in shipping. Hardwoods, however, are preferred in manufacturing fabricated products where they account for about 70 percent of all lumber consumed.

Oak species comprise about half of the hardwood lumber produced and gum, maple, yellow poplar, and cottonwood most of the remainder.

Saw-log price quotations show little change

Although there has been some fluctuation, saw-log price quotations have not changed significantly in the last few years (fig. 8).

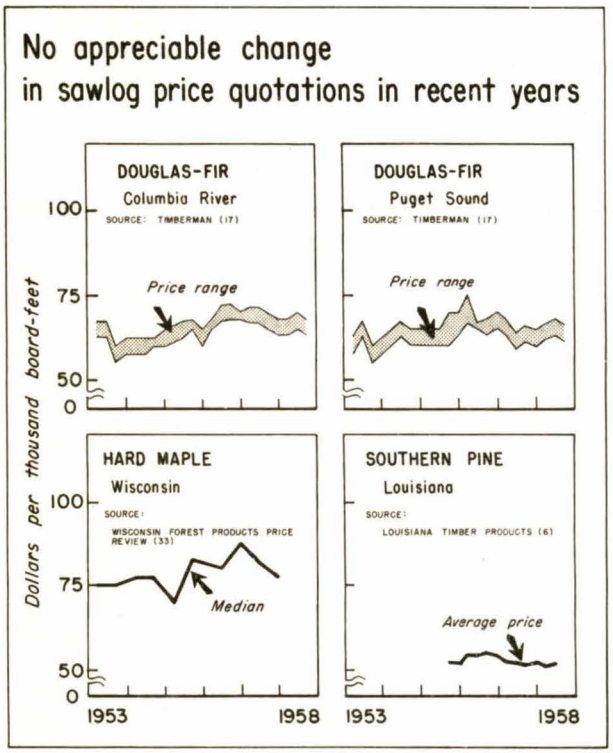

Figure 8

Currently grade No. 1 Douglas-fir saw logs, as reported in the Timberman, are quoted in the Puget Sound and Columbia River log markets at from $61 to $68 a thousand board-feet. This same range covers most of the price quotations reported since 1951. Although comparable data for saw logs in other regions are not available, it seems on the basis of fragmentary information that price quotations of other saw log species, have also shown little change.

Several States publish saw log price quotations (1, 4, 6, 12, 13, 14, 16, 31, 32, 33) based on local scales and grading systems. Illustrative saw log prices for various species taken from some of the State reports issued in 1958 are shown in the following tabulation:

Species:	*State and source*	*Price of sawlogs per thousand bd.-ft.*
Southern pine	Louisiana (6)	$45.00 - 55.00
Gums	Louisiana (6)	25.00 - 45.00
White oak	Illinois (4)	25.00 - 65.00
Hard maple	Wisconsin (33)	[1] 35.00 - 60.00
Yellow birch	Wisconsin (33)	[1] 50.00 - 70.00
Southern pine	North Carolina (13) (Coastal Plain)	[2] 45.00 - 55.00
Poplar	North Carolina (13) (Coastal Plain)	[2] 30.00 - 65.00
Pine	Vermont (31) (Northwestern)	[3] 40.00 - 42.00

[1] Woods run.
[2] Doyle rule.
[3] Woods run and No. 1.

Decline in demand for saw logs reflects drop in economic activity and substitution

The decline in the saw log and lumber production in 1957 and 1958 can largely be traced to four major developments.

First has been the drop in residential construction--the most important single use for lumber (fig. 9). Between May 1955 and February 1958, new private nonfarm housing starts declined 34 percent, falling from a seasonally adjusted annual rate of 1,381 thousand units to 915 thousand units (fig. 10). Second, nonresidential construction, the next largest end use of lumber, declined in the late fall of 1957 and early 1958 largely because of a sharp drop in industrial building (fig. 10). Third has been the decline in industrial production and related economic activity which has affected other lumber markets in manufacturing and shipping. Between August of 1957 and April of 1958, the output of household furniture declined 10 percent, radio and television sets 47 percent, and all manufactured products

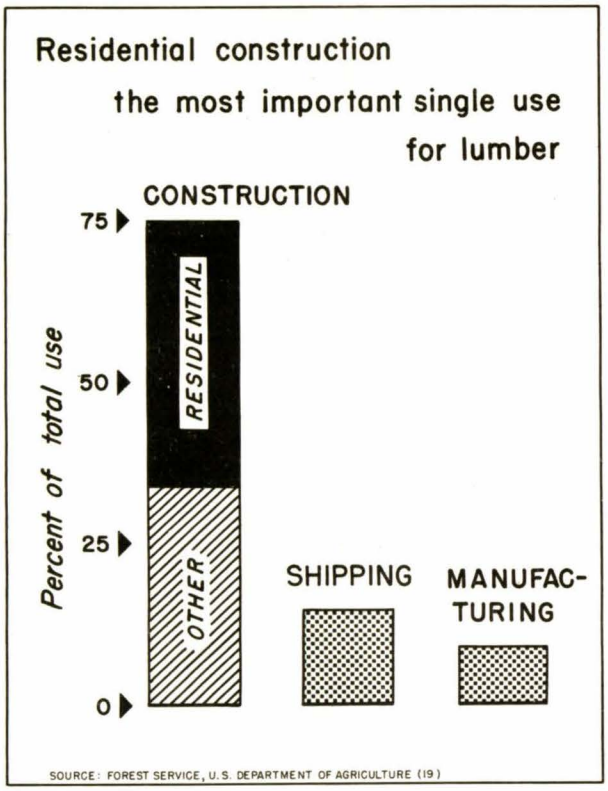

Figure 9

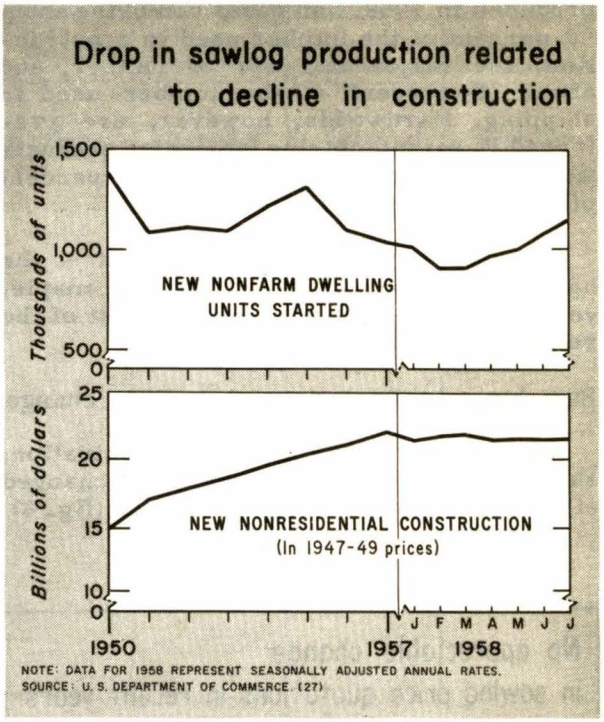

Figure 10

13 percent.[5] During the same period freight car loadings dropped 22 percent.

The fourth major development has been substitution of other materials for lumber. Substitution has been going on for a long time, but there is some evidence which indicates that the rate has increased during the past two or three years. For example, per capita consumption of lumber (which averaged around 250 board-feet in the period 1939 to 1950) dropped from 268 board-feet in 1950 to a current level of 201 board-feet (fig. 11). In contrast, per capita consumption of softwood plywood, building board, and container board--important substitutes for lumber in construction and shipping--has increased since 1950.

Some increase in demand expected in the period immediately ahead.

Although the demand for saw logs and lumber has been downward since 1956, it is expected to start rising in the period immediately ahead. While this will largely reflect the improvement in general economic conditions and rising levels of construction, particularly residential construction, recent declines in lumber prices in relation to competing materials are expected to have some effect through reducing the rate of substitution of other materials for lumber.

The wholesale price index of lumber (1947-49=100) reached a peak of 130.6 in April of 1956 but dropped thereafter to a low of 115.9 in March and April of 1958, a decline of about 11 percent (29). In contrast, most of the materials which compete with lumber, such as steel, structural clay products, and paperboard, have increased in price during this period (table 6, fig. 12). This divergence in prices has presumably improved the competitive position of lumber.

Substitution may also be reduced to some extent by promotional programs currently being undertaken by lumber manufacturing associations, and by improved marketing practices such as grade marking and packaging of lumber being adopted by many lumber manufacturers. The sharp drop

[5] As measured by Federal Reserve indexes 1947-49=100 adjusted for seasonal variation (2).

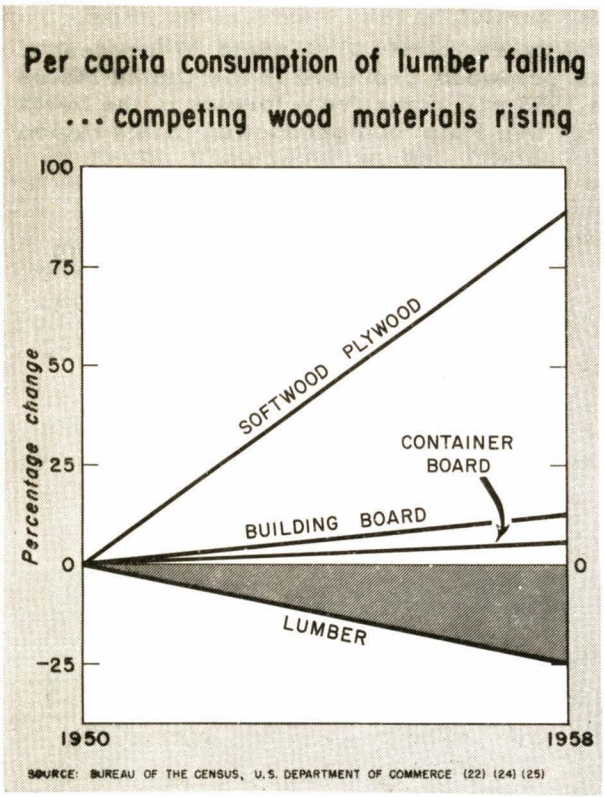

Figure 11

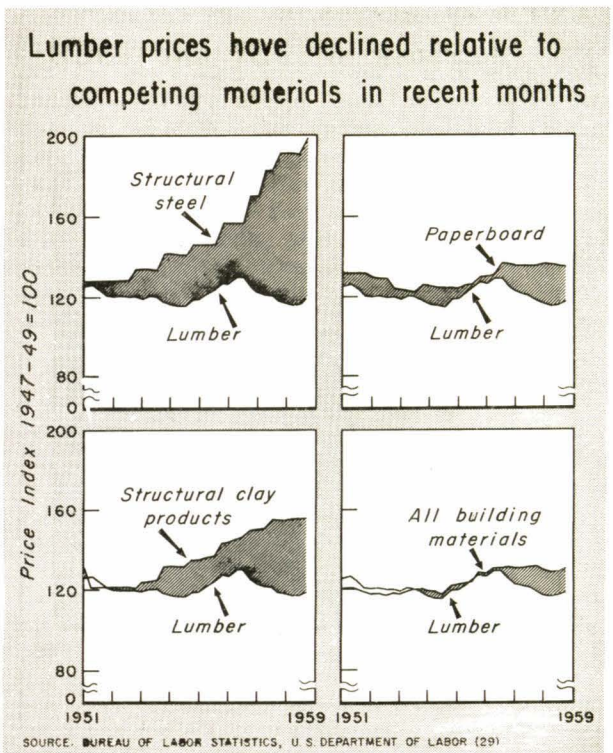

Figure 12

in the number of small sawmills which has occurred in recent years may also result in better manufactured lumber.

Looking further ahead substantial increases expected

During the next decade, further increases are expected in the demand for saw logs and lumber, particularly in residential construction. It is generally anticipated that residential construction will increase substantially in the early 1960's as the upsurge in birth rates that started in the early 1940's results in increased formation of new families. Some further impetus is also expected to come from movement of city populations to suburbs, by the need for larger houses, and by increases in income which will permit an improvement in the general level of housing. Increased family formation and more residential construction will in turn tend to increase demand for radio and television sets, shipping containers, and other items fabricated in whole or part from lumber. Looking further ahead the Forest Service has estimated that by 1975 potential demands for saw logs and lumber may be 21 to 41 percent above the level prevailing in the period 1950-56.

THE DEMAND AND PRICE OUTLOOK FOR PULPWOOD

Pulpwood production shows some decline in 1957 and 1958

Pulpwood production in the United States during 1958 is estimated at 33.5 million cords, including about 4 million cords of residues (table 7, fig. 13). This is about 3 percent below production in 1957 and 5 percent below 1956--the peak year in production. Net imports of pulpwood from Canada in 1958 are estimated at 1.7 million cords and withdrawals from stocks, 0.5 million cords. Pulpwood consumption in 1958 is thus expected to amount to 35.7 million cords, or about the same as in 1956 and 1957. In addition to this, it is anticipated that the equivalent of 8.5 million cords of pulpwood will be imported (net imports) in the form of woodpulp, newsprint, and other paper and paperboard.

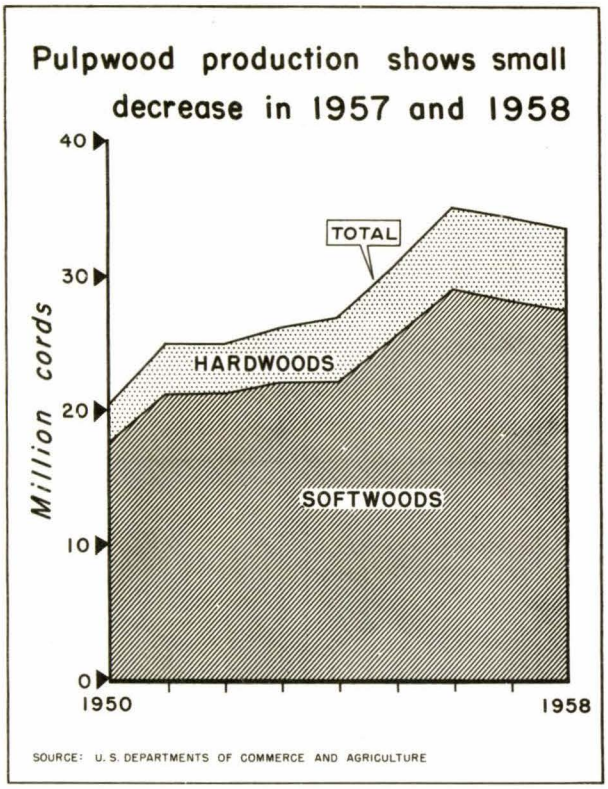

Figure 13

Softwoods preferred for pulpwood

Softwoods, chiefly southern pine, western hemlock, Douglas-fir, spruce, and true firs make up about 82 percent of the pulpwood currently produced. In the South, softwoods comprise about 85 percent of the total cut, in the North 55 percent, and in the West almost 100 percent of the total. Softwoods are preferred over hardwoods for many grades of paper and board because of longer fibre lengths and greater strength for pulp and paper.

Although the proportion of hardwood pulpwood to softwood pulpwood has not changed appreciably for many years, hardwood pulpwood production has climbed from about 0.8 million cords in 1920 to an estimated 6.0 million cords in 1958. The production of hardwoods--chiefly aspen and gums--has been expanding as a result of increased competition for wood, higher prices for softwood timber, and the development of suitable processes for pulping hardwoods.

Pulpwood production concentrated in the South

It is estimated that about 57 percent of the pulpwood produced in the United States in 1958 will come from forests in the South (fig. 14). Pulpwood production in this region

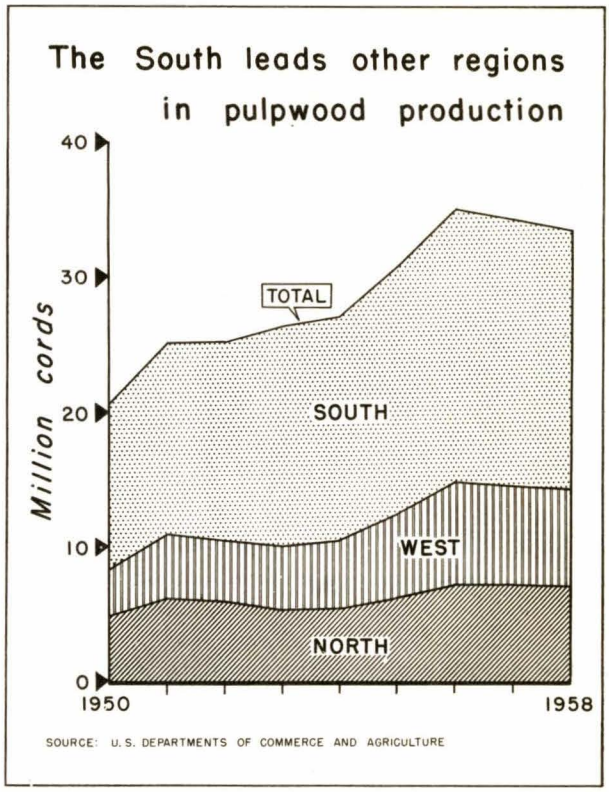

Figure 14

has been increasing rapidly, rising from about 8.1 million cords in 1945 to the estimated 19.2 million cords in 1958. In recent years the use of residues from sawmills and veneer plants has also shown a very rapid increase, rising from 76 thousand cords in 1953 to 1.2 million cords in 1957 (20). During this later year, residues comprised 6 percent of all the pulpwood produced in the South.

In the West expansion has also been rapid and pulpwood production has increased from about 2.5 million cords in 1945 to an estimated 7.2 million cords in 1958. The use of plant residues for pulping is particularly important in this region and currently more than one-third of the wood

used in pulping consists of residues from sawmills and veneer mills. Although the proportion of residues used in pulping has been steadily increasing, there are large quantities of waste material still not utilized.

Pulpwood production in the North has increased slowly in recent years. Most of the increase has been based on the use of hardwoods in the production of semichemical and other related pulps.

Pulpwood prices show little change since 1956

Pulpwood prices at local points of delivery have shown little change since 1956 (table 8, fig. 15). In the Southeast, for example, the price of rough pine pulpwood at local points of delivery currently amounts to $15.50 per cord. This is about the same as the price received in 1956 and 1957.

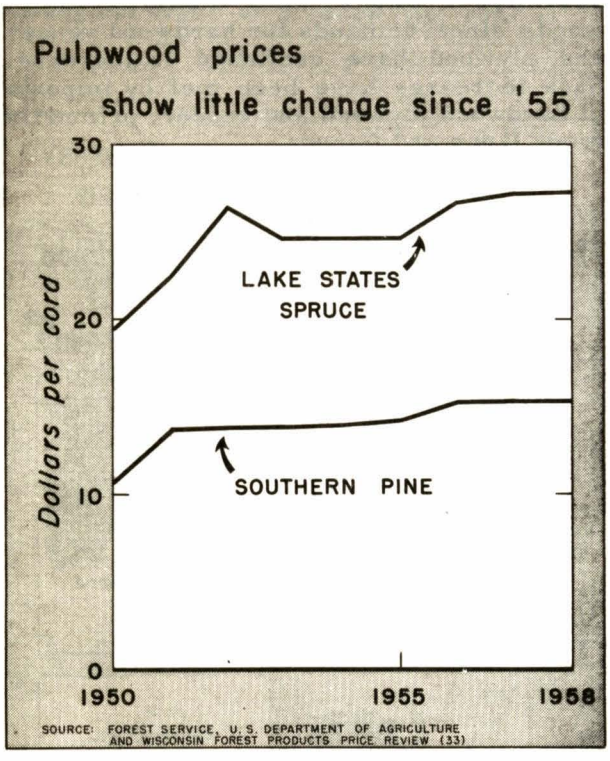

Figure 15

Pulpwood prices show considerable variation among regions, depending upon species, availability of local timber supplies, and other factors. Thus, in the Lake States prices of rough pulpwood f.o.b. car currently average about $24.75 per cord for spruce, $16.00 for pine, and $11.75 for aspen and northern hardwood. In the Northeast, prices f.o.b. car average about $20.00 per rough cord for spruce and fir and $14.50 for white pine. In the South the prices per rough cord f.o.b. car average about $15.00 for pine and $12.00 for hardwoods.

Several States publish reports containing price quotations for pulpwood at local points of delivery (1, 3, 4, 6, 11, 12, 13, 14, 31, 32, 33). In general, since one unit of measure (the cord) is more or less in standard use, these price reports are fairly representative of the prices received for pulpwood. Illustrative pulpwood prices at local points of delivery taken from some of the State reports issued in 1958 for various pulpwood species are shown in the tabulation below:

Species:	*State and source*	*Price of rough pulpwood per cord*
Southern pine	Louisiana (6)	$14.80
Hardwoods	Louisiana (6)	12.00
Mixed hardwoods	Wisconsin (33)	[1] 14.50 - 15.00
Balsam fir	Wisconsin (33)	[1] 22.00 - 23.50
Spruce	Wisconsin (33)	[1] 26.00 - 28.50
Pine	Wisconsin (33)	[1] 17.50 - 18.50
Southern pine	North Carolina (13)	13.50 - 14.75
Hardwoods	North Carolina (13)	11.00

[1] Delivered at mill.

Decline in demand for pulpwood believed temporary

The recent decline in demand for pulpwood is believed to be only a temporary reversal of a trend which has been almost steadily upward since 1900. Many forecasts by different agencies indicate that the demand for pulpwood in the United States is likely to continue to increase rapidly. The Forest Service for example, has recently estimated that the potential demand for pulpwood[6] in 1975 may be between 45 and 65 percent higher than 1956 (19).

[6] The demand for pulpwood for consumption in United States woodpulp mills.

THE DEMAND AND PRICE OUTLOOK FOR VENEER LOGS

Veneer log production shows little change since 1955

The volume of veneer logs produced in the United States in 1958 is estimated at 3.5 billion board-feet (table 9, fig. 16). Total production is thus about the same as in 1956 but slightly higher than in 1957 when 3.3 billion board-feet was produced.

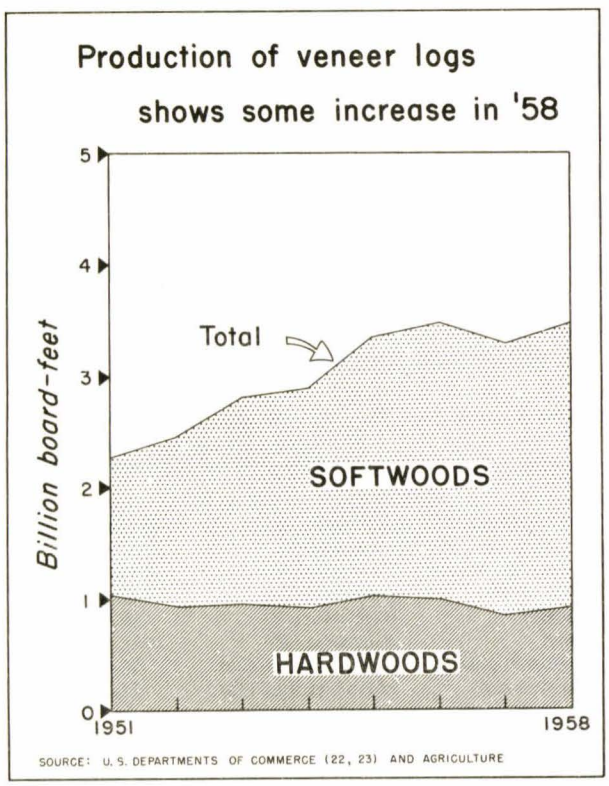

Figure 16

Although total veneer log production has shown little change since 1956, there has been some increase in softwood veneer log production and a small decline in hardwood veneer log production. This is generally in line with long run trends. In the last two decades, for example, production of softwood veneer logs has increased from 460 million board-feet to an estimated 2.6 billion board-feet. This rapid increase can be partly attributed to expanding uses for softwood plywood in construction where substitution of softwood plywood for lumber has advanced rapidly. Development of moisture resistent and waterproof glues that have permitted use of exterior grades of plywood in exposed locations without risk of glue failure have also contributed to this increase.

Increases in the demand for softwood plywood since 1955 apparently indicate that the substitution of softwood plywood for lumber has been increasing at a rate fast enough to offset the effects of the decline in construction and general economic activity. This in part reflects the fact that the price of softwood plywood in relation to the price of lumber has been declining (fig. 17). Increasing wage rates, particularly in construction, have also tended to increase the advantage of plywood because plywood can be put in place with much less labor than lumber.

There has been little change in the volume of domestic hardwood veneer logs produced since the early 1940's. This presumably reflects in part a growing scarcity of high-quality domestic hardwoods since demands for hardwood veneer and plywood have continued to increase. Such increases have been met by imports of hardwood plywood and veneer, primarily from Japan and Canada.

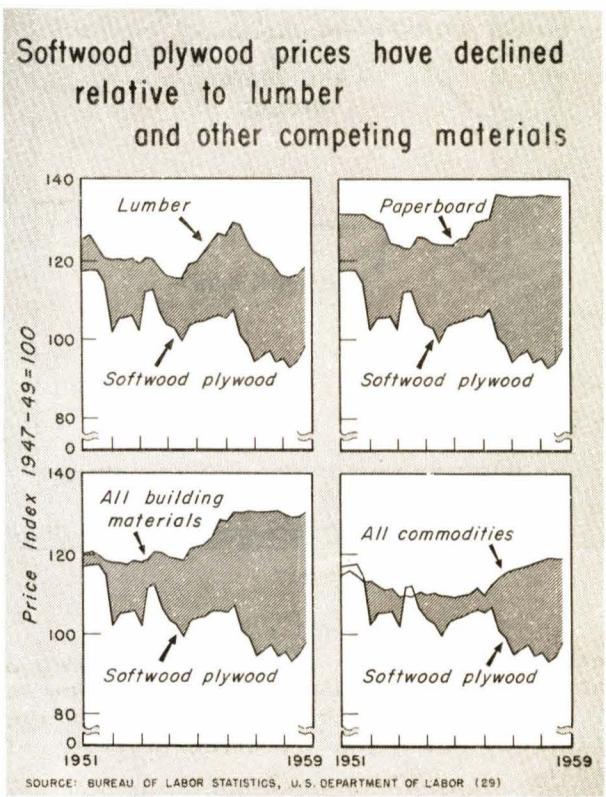

Figure 17

The softwood veneer and plywood industry is highly localized, embracing about 120 mills in the Pacific Northwest and California. Production has been based chiefly on Douglas-fir which has represented from 95 to 98 percent of the wood consumed. On the other hand, the hardwood veneer and plywood industry embraces about 500 mills located in the East. It depends upon gum, birch, yellow poplar and a wide variety of other hardwood species for raw material.

Veneer log price quotations also show little change

In August of 1958, the price quotations for Douglas-fir No. 1 peeler logs ranged between $113 and $118 in the Puget Sound log market and from $105 to $110 in the Columbia River market (17). Although there has been some fluctuation, this general level has been maintained without significant change during the last 3 or 4 years (fig. 18).

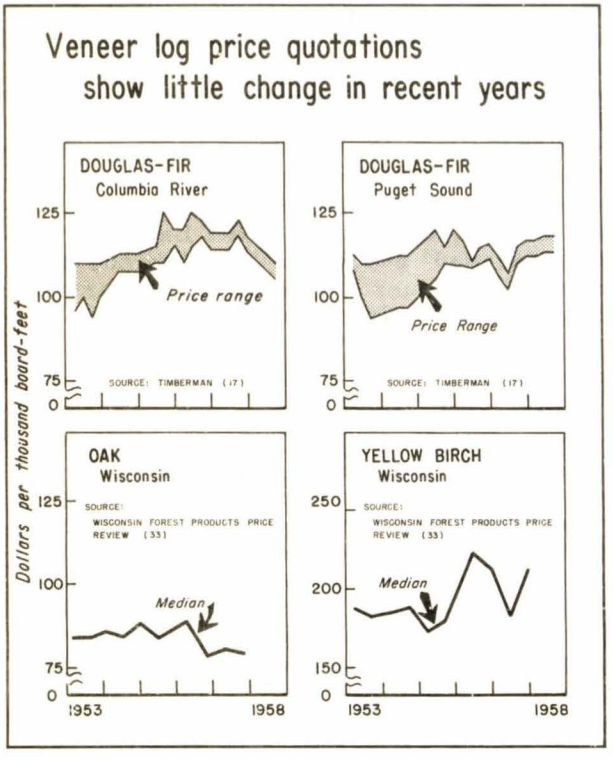

Figure 18

The present level, however, is more than three times as high as in 1940. This large increase in prices reflects the spectacular growth of the softwood plywood industry and the consequent increased demands for high-grade logs, rising log production costs, and increased stumpage prices resulting from a gradual decline in the availability of high-quality, old-growth timber. Improvement in technology which has permitted the efficient use of lower grade logs has been an offsetting factor in this price increase.

Prices for hardwood veneer logs have also been relatively stable in recent years (fig. 18) although prices by grades and species vary widely. Black walnut veneer logs, for example, currently average about $270 f.o.b. car in Illinois, whereas sweet gum and yellow-poplar logs used in the manufacture of veneer for baskets, berry boxes, and other containers average about $45 (4).

Several States publish reports which contain price quotations for veneer logs (1, 4, 13, 14, 31, 33). Illustrative veneer log prices at local points of delivery taken from some of the State reports issued in 1958 for various species and grades of veneer logs are shown in the tabulation below:

Species:	*State and source*	*Price of veneer logs per thousand bd.-ft.*
Yellow poplar	North Carolina (13) (Coastal Plain)	[1] $35.00 - 80.00
Hard maple	Wisconsin (33)	70.00 - 140.00
Yellow birch	Wisconsin (33)	160.00-285.00
Basswood	Vermont (31) (Eastern)	20.00 - 100.00
Walnut	Illinois (4)	[2] 100.00 - 350.00
White oak	Illinois (4)	[2] 100.00 - 125.00

[1] Doyle rule.
[2] F.O.B. Car.

The above price quotations must be considered as only roughly indicative of values of veneer logs in any particular log market. As in the case of saw logs, there is little information available on actual transaction prices for veneer logs in terms of standard grades and volume units.

Demand likely to increase for both softwood and hardwood veneer logs

Over the next few years, the demand for softwood plywood is likely to increase in response to more substitution of plywood for lumber and rising levels of construction, particularly residential construction. Although softwood plywood was used for one purpose or another in 78 percent of

all new nonfarm single-family houses started during the first quarter of 1956, (see tabulation below), there was still a lot of room for expansion (30): It was, for example, used for roof sheathing in only 19 percent of the houses started and for exterior wall sheathing in 12 percent of the starts.

	Houses	
	Number	Percent
Total houses started	218,600	100
Houses in which plywood was used in one or more components	171,500	78
Roof sheathing	42,000	19
Exterior--wall sheathing	26,000	12
Exterior--wall facing	12,500	6
Subflooring	121,600	56
Interior walls and ceilings	17,400	8
Built-ins, partitions and misc.	70,600	32
Use not reported	1,900	1

The demand for hardwood plywood and veneer is also likely to increase, although not as rapidly as softwood plywood, as the demand for furniture, radio, television cabinets, and other similar products rises.

On the basis of the above expectations and related expectations concerning the growth of population and increases in income, the Forest Service has estimated that the demand for veneer logs may increase from 32 to 49 percent above present levels by 1975. Some of this increased demand, particularly for hardwood veneer logs, is likely to be met by imports.

THE DEMAND AND PRICE OUTLOOK FOR OTHER ROUNDWOOD PRODUCTS

Production of other industrial roundwood products shows variable trends--prices vary widely

The production of industrial roundwood products such as cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products (fuelwood excluded) amounted to about 700 million cubic feet and accounted for about 8 percent of the industrial roundwood produced in the United States in 1952, the latest year for which estimates by individual product are available. Production of individual products since then has shown variable trends.

Piling and poles.--In 1952, about 28 million cubic feet of piling and 6.5 million poles were produced in the United States. Since 1952 data on the volume of materials preservatively treated indicates there has been no substantial change in the production of piling, but a modest decline in the production of poles.

Pole and piling prices vary considerably according to length, diameter, and other quality factors. Illustrative prices at local points of delivery, taken from State reports published in 1958 are shown in the tabulation below:

Species:	State and source	Price per pole
Southern pine	North Carolina (13)	30 ft. = $1.80 - 4.50
		50 ft. = 11.00 - 18.00
		70 ft. = 31.00 - 42.00
Cedar	Wisconsin (33)	30 ft. = 4.50 - 5.00
Southern pine	Louisiana (6)	30 ft. = 2.45 - 3.25
		50 ft. = 14.20 - 17.30
		70 ft. = 37.50 - 55.70

Wood for charcoal.--The production of wood for charcoal manufacture amounted to about 574 thousand cords in 1956, including 149 thousand cords of residues (18). This was slightly above the previous postwar peak reached in 1952, and moderately above production in other postwar years.

In 1956, prices of roundwood delivered at charcoal plants ranged between a low of $6.90 per cord in the Central States to a high of $12.70 per cord in the Lake States, and averaged $11.70 in the Nation. The price of residues averaged $8.75 for the country.

Consumption of Christmas trees rising slowly

The use of Christmas trees in the United States has been rising slowly and consumption now amounts to more than 40 million trees annually, including about 28 million produced in domestic forests and 12 million imported from Canada. Prices paid to timber growers for Christmas trees vary widely. In Oregon, for example, prices paid on the stump for wild trees generally ranged from 10¢ to 60¢ in 1957 (14) depending on the species and size of trees. A similar range of prices was paid in Montana (8). In contrast, plantation-grown Christmas trees on the stump in Pennsylvania were reported to have sold for prices generally ranging from $1.50 to $4 per tree (15).

The relatively high prices paid for plantation-grown trees has attracted many new

producers and resulted in a very large increase in Christmas tree plantings. Recent surveys in Michigan (5), Ohio (7), and Pennsylvania (15) show that total Christmas tree planting in these three States alone amounts to some 20 million trees a year. Trends in Christmas tree planting suggest increasingly strong competition for available markets and lower prices than growers have received in recent years.

THE DEMAND AND PRICE OUTLOOK FOR NAVAL STORES

Reduction in output expected to continue in 1958

The downward trend in rosin production which began in 1957 is expected to continue although at a diminishing rate. Thus, production of about 1,830,000 drums is expected in the 1958 crop year--a 2% decrease from the previous year. (table 10). The expected 6% increase in tall oil rosin production probably will be insufficient to offset anticipated decreases of about 7% in gum rosin and 1 to 2% in steam distilled wood rosin.

Similarly, a slight reduction is likely in overall turpentine output, mainly reflecting a 6% decline in production of gum turpentine. For turpentine, this will be the third consecutive year of reduced output.

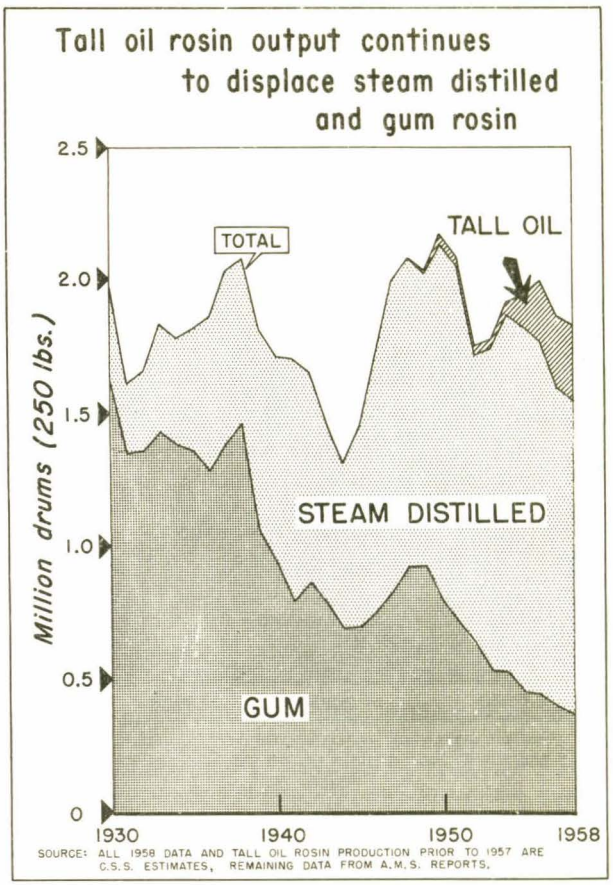

Figure 19

Shift in output sources likely to continue

Although, in the aggregate, there has been little change in rosin and turpentine production over the past 3 decades, a shift in output sources has occurred and is likely to continue awhile away from gum and steam distilled wood naval stores and toward naval stores recovered as a byproduct of the kraft paper industry (Fig. 19 and 20). In the years immediately ahead, it is doubtful whether increased production of tall oil rosin and sulphate turpentine will fully offset the declines in other supply sources. At present, rosin production divides about 20-65-15 among gum, steam distilled and sulphate sources.

The peak of steam distilled wood and turpentine output was reached in 1955 and the long term trend, harnessed to a shrinking supply of first growth pine stumps, is downward. This year, steam distilled rosin output will be 14% less than in 1955. The concern of steam distilled naval stores producers over future sources of supply is evidenced by their increasing interest and investment in the supply of other types.

Except for the immediate post World War II period, 1946-1949, gum naval stores production has been trending downward for about 30 years. Factors which may eventually reverse this trend include an increasing inclination of pulp mills to lease forest tracts for gum farming. Revenue from 5 year gum farming leases approaches the wood pulp value of the tree. Hope also rests in current development of faster growing and higher yielding pines, together with improved forest management and production practices.

The tall oil fractionation plants now operating have a maximum potential capacity capable of doubling present tall oil rosin production. Full utilization of this capacity is still at least several years away. The increasing use of hardwoods in sulphate pulp mills is yielding tall oil with a lower resin acid content. Further, the production

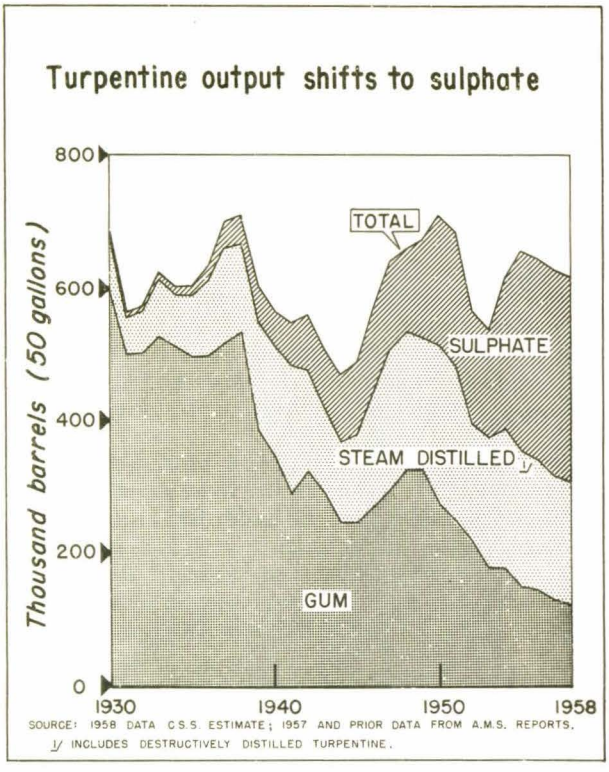

Figure 20

of tall oil rosin is determined in part by competing demands for crude tall oil and on the extent to which the current market can absorb the fatty acids remaining after removal of the rosin.

Ratio of turpentine to rosin output falling

Yields of gum and steam distilled wood turpentine relative to corresponding rosin output has been declining and continues to fall steadily as shown in the following tabulation:

Period (Crop Years Beg. April 1)	*Gallons Turpentine Yield per Drum of Rosin Output*		
	Steam Distilled	*Gum*	*Both Types Weighted Avg.*
1920-1929	12.1	18.5	17.7
1930-1939	10.3	18.4	16.4
1940-1949	9.3	17.9	13.4
1950-1957	8.0	16.8	10.7

Little change in stocks expected

Change in total stocks of turpentine probably will be negligible next March 31. Rosin stocks may be slightly lower. Stocks of turpentine will be close to the long time average of 2-1/2 months supply. About 25,000 drums of gum rosin (7% of the crop) probably will be placed in the 1958 loan. All of the pale grades and some, if not all, of the lower grades are likely to be redeemed before the expiration date for redemptions next July 1. Turpentine pledged to the loan is not expected to exceed 6,000 barrels (5% of the crop). About 4/5 of overall rosin stocks and 1/10th of turpentine stocks are held by CCC.

Domestic consumption to approximate 1957 levels

Through August 1958, domestic disappearance of both rosin and turpentine is slightly less than during the same period last year. However, consumption over the remainder of the year is likely to outstrip last year's performance and for the year as a whole should approximate 1957 consumption.

The lower rosin consumption through August reflects in part reduced paper and S-type synthetic rubber production. Output of these commodities April through August is down about 1 and 9%, respectively, from the same period in 1957.

Kraft paper output has felt the cutback more than overall paper production. Through August, output is down 5% from last year. The letdown in the S-type rubber market has been even more severe than indicated by production because rubber stocks have been increasing. Production of both paper and rubber is beginning to increase in line with general industrial recovery from the recent recession. By March 31, 1959, paper output over the naval stores crop year should at least equal that of the previous crop year.

The principal domestic outlets for rosin since 1930 are shown in Figure 21. Consumption has been increasing in paper size, chemicals and rubber; decreasing in paints and soap. These trends are likely to continue. For example, increased production of bleached papers points toward increased requirements of rosin for sizing.

Industrial use of turpentine increasing

Total domestic use of turpentine is not expected to change much in the 1958 crop

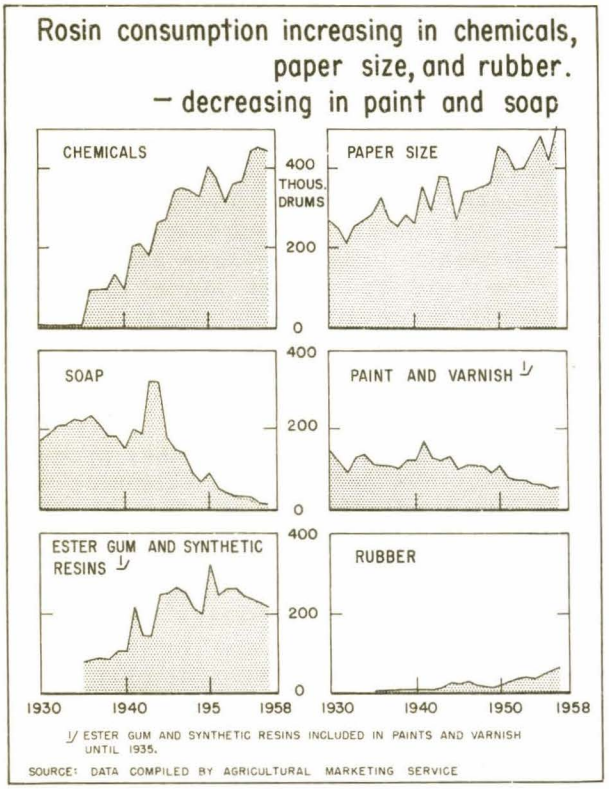

Figure 21

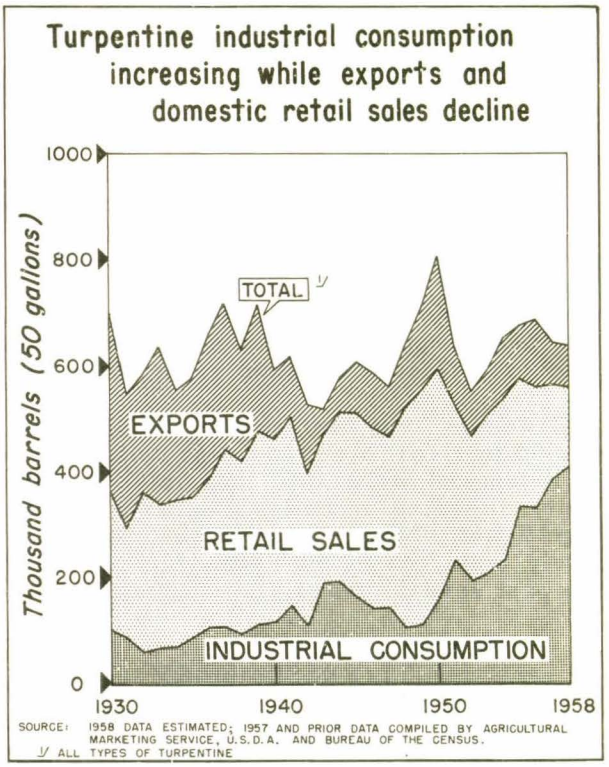

Figure 22

year. However, industrial consumption is likely to continue increasing and, perhaps, at the expense of sales in small containers to householders for paint thinning, cleaning and other uses (Figure 22). The most recent trend toward industrial use of turpentine began in 1948 when industrial and retail use of turpentine was allocated about 1 to 5. By the 1957 crop year, this proportion had changed to about 7 to 3. The trend is expected to continue in the 1958 crop year with slightly lower turpentine usage in small containers and increased industrial utilization, particularly in the production of synthetic pine oil, beta pinene and insecticides.

Slowdown of European industrial activity may affect exports

Although French, Portuguese, and Greek production and export availabilities are expected to be lower in 1958, a smaller quantity of U. S. rosin may be exported. Western European requirements for rosin probably will be lower because of a slowdown of industrial activity in the United Kingdom, Belgium, Netherlands and to a lesser extent, Germany. No deepening of this slight recession appears likely and it may be over before the close of the crop year. Not much change is anticipated in turpentine exports which are not as closely related to industrial activity.

Foreign production outside the Communist Bloc countries is estimated to be about 20,000 drums of rosin and 8,000 barrels of turpentine less than a year ago. However, foreign stocks were slightly higher on January 1, 1958 than a year earlier and carryovers this year are likely to be minimized. Net exports from the Communist Bloc during 1958 are expected to be higher than last year.

Importance of export outlet declining

Rosin and turpentine exports this year will account for about 28 and 12% of their respective outputs. In contrast, before World War II, 50% of rosin production and 40% of the turpentine crop were exported. Since World War II, exports on the average have absorbed 30% of rosin production and 18% of turpentine output. Both foreign production

and consumption have been trending upward since World War II and the export outlet for American rosin and turpentine is likely to remain substantial.

Rosin prices higher, turpentine lower

Through September of this crop year, rosin prices have averaged 4% more than over the same period in 1957 while turpentine prices were 7% less than last year. Turpentine and high grade rosin prices are likely to rise before the beginning of the next crop year. Not much change is likely in prices of medium grade rosins.

Over the long run, rosin prices are expected to rise in order to meet requirements of increased worldwide industrial productivity. Barring a national emergency, no significant change in turpentine prices is likely from the 50-60¢ per gallon level of the past several years.

OUTLOOK SUMMARY

The volume of industrial roundwood (all round timber products except fuelwood) produced in the United States in 1958 is estimated at 8.6 billion cubic feet. This is about 2 percent less than estimated production in 1957 and 10 percent below production in 1956. Stumpage prices showed a steady decline in 1957 and the first two quarters of 1958, and currently average considerably below prices received in 1956.

The drop in the production of industrial roundwood and stumpage prices has been related to a general decline in economic activity. In recent weeks, however, industrial production, employment, and incomes have increased and housing starts, the most important source of demand for lumber, have reached the highest rate since the summer of 1956. This brightening economic outlook should mean a rising demand for industrial roundwood products such as pulpwood, veneer logs, and saw logs.

Saw logs and lumber

The volume of saw logs and lumber produced in 1958 is estimated at 33.0 billion board-feet. This is about 2 percent less than production in 1957 and 12 percent less than production in 1956. The West is expected to account for about 54 percent of total production, the South 33 percent, and the North 13 percent.

In contrast to the sharp decline in production, saw log price quotations have shown little change in recent years. According to prices quoted in the Timberman, the price of grade No. 1, Douglas-fir saw logs in the Puget Sound and Columbia River log markets of western Oregon and Washington have generally ranged between $55 and $75 per thousand board-feet since 1951. On the basis of fragmentary information, it seems that prices of other saw log species in other regions have also remained fairly stable.

The drop in saw log and lumber production reflects a decrease in economic activity and continuing substitution of other materials for lumber--including both wood items such as plywood and paperboard and nonwood materials. The long-term outlook, nevertheless indicates expanding markets for saw logs and lumber along with rising levels of construction and business activity.

Since 1956, the price of lumber has declined about 11 percent while the price of most of the materials which compete with lumber have been increasing. This divergence in prices has presumably improved the competitive position of lumber and if continued should tend to slow the rate of substitution of other materials for lumber.

Substitution may also be reduced to some extent by promotional programs currently being undertaken by the various lumber manufacturing associations and by improved marketing practices such as grade marking, trade marking, and packaging of lumber being adopted by many lumber manufacturers.

Pulpwood

Pulpwood production in 1958 is estimated at 33.5 million cords including about 4 million cords of residues. This is about 3 percent below production in 1957 and 5 percent below the peak year 1956.

Softwoods such as southern pine, western hemlock, Douglas-fir, spruce, and true firs are expected to make up about 82 percent of the pulpwood produced in 1958. About 57 percent of the pulpwood cut in 1958 will come from the South, 22 percent

from the West, and the remaining 21 percent from forests in the North.

As was the case with saw logs, pulpwood prices have not changed much recently. In the Southeast, for example, the price of rough pine pulpwood at local points of delivery currently amounts to $15.50 per cord. This is nearly the same as prices received in 1956 and 1957 but reflects a modest increase over the $14.40 per cord received in 1955.

The decrease in pulpwood production since 1956 marks what is believed to be a temporary reversal in a trend that has been sharply upward for many years. There are a variety of forecasts made by different agencies which indicate that the demand for pulpwood in the United States is likely to increase rapidly. The Forest Service for example has estimated that the demand for pulpwood in 1975 may be between 45 and 65 percent higher than 1956.

Veneer logs

The volume of veneer logs produced in 1958 is estimated at 3.5 billion board-feet. Total production is thus about the same as in 1956, but slightly higher than in 1957 when 3.3 billion board-feet was produced. Although total veneer log production has shown little change since 1956, there has been some increase in softwood veneer log production and a small decline in hardwood log production. This is generally in line with long run trends. In the last two decades the production of softwood veneer logs has increased from 460 million board-feet to an estimated 2.6 billion board-feet. In contrast, there has been little change in the volume of hardwood veneer logs produced since the early 1940's.

Currently the price quotations for Douglas-fir grade No. 1 veneer logs as reported by the Timberman range from $113 to $118 in the Puget Sound log market and from $105 to $110 in the Columbia River market. Although there has been some fluctuation, this price level has been maintained without significant change during the past 3 or 4 years. Prices for hardwood veneer logs have displayed a similar stability.

The outlook for veneer logs is highly favorable. Demands for softwood veneer logs because of continued substitution of softwood plywood for lumber, particularly in residential construction, are likely to increase more rapidly than demands for hardwood veneer logs.

Other roundwood timber products.--The production of other industrial roundwood timber products, including cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, and a miscellaneous assortment of other products amounted to about 700 million cubic feet in 1952. Since then trends in the production of these products have been variable--some increasing and others decreasing.

Christmas trees

The use of Christmas trees in the United States has been rising slowly and consumption is now in excess of 40 million trees annually, including about 28 million produced in domestic forests and 12 million imported from Canada. Stumpage prices paid to timber growers vary widely, ranging from as low as 10¢ per tree for wild trees to $4 or more for plantation-grown trees.

The relatively high prices paid for plantation-grown trees in the past has attracted new producers and resulted in large increases in Christmas tree plantings. This has advanced to the point that recent surveys in Michigan, Ohio, and Pennsylvania show that total Christmas tree planting in these three States alone amounts to some 20 million trees a year. This high volume of planting suggests the possibility of sharply increased competition for available markets and lower prices than growers have received in recent years.

Naval Stores--Overall naval stores production is likely to be lower in 1958. Declines in gum and steam distilled wood rosin should more than offset increased tall oil rosin. The expected slight reduction in overall turpentine output reflects lower gum turpentine production. Little change is anticipated in domestic consumption of both rosin and turpentine and in turpentine exports. Rosin exports are likely to be less than a year ago. No change in turpentine stocks and a slight reduction in rosin stocks is expected on March 31, 1959. No increase is anticipated in CCC holdings; conversely, these may decline.

Turpentine and high grade rosin prices probably will rise before the beginning of the next crop year. Not much price change is expected in medium grade rosin.

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(13) North Carolina State College Extension Forestry Office and U. S. Dept. Agr., cooperating.
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(14) Oregon State College Extension Forestry Office and U. S. Dept. Agr., cooperating.
Farm forest products market report. (Weekly. Quotes delivered saw log and veneer log prices by species and quality grade for several localities. Occasionally reports prices for such miscellaneous products as poles, piling, maple burls, sword fern, and short pulpwood.)

(15) Pennsylvania Crop Reporting Service, U. S. Dept. Agr. and the Pennsylvania Dept. Agr., cooperating.
1957. Pennsylvania Christmas tree survey. 53 pp.

(16) Purdue University Extension Forestry Office and U. S. Dept. Agr., cooperating.
Indiana timber price report. (Semiannual. Quotes prices for delivered saw logs, veneer logs, pulpwood, and piling.)

(17) Timberman, the (Portland, Oregon).
(Monthly. Quotes log prices in Columbia River, Grays Harbor, Puget Sound, and Coos Bay for Douglas-fir, hemlock, and western red cedar logs.)

(18) United States Department of Agriculture, Forest Service.
1957. Charcoal production in the United States. 14 pp.

(19) _____
1958. Future Demand for timber. Separate 9, 114 pp. Reprinted from Forest Resource Rpt. 14, Timber Resources for America's Future (contains an analysis of the quantities of timber that might be demanded by the U. S. economy under explicit and reasonable assumptions in 1975 and 2000).

(20) _____
Pulpwood production in the South. (Annually.)

(21) _____
1958. Timber resource's for America's future. Forest Resource Rpt. 14. 713 pp., illus.

(22) United States Department of Commerce, Bureau of the Census.
Facts for industry series. Softwood plywood and veneer. (Contains annual statistics on the production of softwood plywood and veneer and consumption of softwood veneer logs.)

(23) _____
Facts for industry series. Hardwood plywood. Market shipments. (Contains quarterly statistics on shipments of hardwood plywood.)

(24) _____
Facts for industry series. Lumber production and mill stocks. (Contains annual statistics on lumber production by major species and producing region.)

(25) _____
Facts for industry series. Pulp, paper and board. (Contains monthly statistics on pulp, paper and board.)

(26) United States Department of Commerce, Office of Business Economics.
Survey of current business. (Monthly.)

(27) United States Department of Labor and United States Department of Commerce.
Construction review. (Contains monthly statistics on the volume of construction, construction costs, and employment in construction.)

(28) United States Department of Labor, Bureau of Labor Statistics.
Employment and earnings. (Monthly.)

(29) _____
Prices and price indexes for individual commodities. (Monthly. Quotes (f.o.b. mill) prices of selected lumber items of important commercial species and plywood and pulp and paper items.)

(30) _____
1956. Characteristics of new housing, first quarter, 1956, Pt. II, special characteristics, equipment and appliances.

(31) Vermont University Extension Forestry Office and United States Department of Agriculture, cooperating.
Forestry work tools. (Bi-monthly. Quotes prices of delivered logs and bolts for various species and products in several marketing areas in Vermont.)

(32) Washington State College Department of Forestry and Range Management.
Farm woodland market report. (Monthly. Quotes prices for stumpage and delivered logs in Eastern Washington by species.)

(33) Wisconsin University Extension Forestry Office and Wisconsin Conservation Department, cooperating.
Wisconsin forest products review (currently printed in Lake States Timber Digest). (Semiannual. Quotes prices for stumpage, delivered logs and bolts, lumber, railway crossties, piling, poles, and posts.)

APPENDIX

TABLE 1.--Estimated market value of forest products[1] and farm crops harvested in the United States, by State, 1954

(Thousands of dollars)

State, region and section	Market value of forest products harvested[1]	Market value of farm crops harvested[2]				
		Total	Corn	Cotton	Wheat	All other
Maine	56,900	90,854	530	--	--	90,324
New Hampshire	18,600	18,197	802	--	--	17,395
Vermont	19,600	48,969	4,157	--	--	44,812
Massachusetts	4,400	55,138	2,009	--	--	53,129
Rhode Island	200	5,466	289	--	--	5,177
Connecticut	1,400	58,935	2,622	--	--	56,313
New York	33,800	363,136	51,444	--	22,308	289,384
New Jersey	3,500	110,641	14,808	--	3,628	92,205
Pennsylvania	39,300	353,820	97,198	--	35,772	220,850
Northeast	177,700	1,105,156	173,859	--	61,708	869,589
Ohio	16,300	686,427	301,137	--	93,117	292,173
Indiana	11,100	684,670	368,133	--	78,727	237,810
Illinois	9,500	1,219,938	654,839	288	95,185	469,626
Michigan	40,900	430,701	118,415	--	60,135	252,151
Wisconsin	34,200	534,456	188,036	--	2,741	343,679
Minnesota	24,900	827,464	340,865	--	22,325	464,274
Iowa	4,100	1,249,280	806,496	--	4,495	438,289
Missouri	22,900	489,297	137,167	76,732	66,014	209,384
North Dakota	700	436,682	36,860	--	144,425	255,397
South Dakota	1,200	403,550	156,142	--	55,854	191,554
Nebraska	1,300	642,562	283,794	--	122,346	236,422
Kansas	3,300	647,887	68,708	--	358,838	220,341
North Central	170,400	8,252,914	3,460,592	77,020	1,104,202	3,611,100
Total North	348,100	9,358,070	3,634,451	77,020	1,165,910	4,480,689
Delaware	3,000	27,715	9,674	--	1,822	16,219
Maryland	14,000	114,507	32,947	(3)	10,279	71,281
Virginia	73,100	292,683	51,411	2,118	13,427	225,727
West Virginia	24,000	67,461	13,514	--	2,126	51,821
North Carolina	100,700	819,457	78,694	70,042	12,465	658,256
South Carolina	62,400	262,730	19,435	94,753	5,325	143,217
Georgia	144,100	340,240	54,265	117,304	4,290	164,381
Florida	54,300	397,063	13,170	4,806	--	379,087
Southeast	475,600	2,321,856	273,110	289,023	49,734	1,709,989
Kentucky	30,700	433,963	91,653	2,169	10,579	329,562
Tennessee	35,800	317,792	56,847	102,623	7,291	151,031
Alabama	102,000	248,234	47,138	139,309	--	61,787
Mississippi	83,700	421,621	42,390	307,971	--	71,260
Arkansas	67,300	415,996	12,894	251,007	--	152,095
Louisiana	64,700	279,092	17,623	106,843	--	154,626
Oklahoma	6,100	309,229	5,356	49,818	141,911	112,144
Texas	69,800	1,328,794	45,981	684,829	63,648	534,336
South Central	460,100	3,754,721	319,882	1,644,569	223,429	1,566,841
Total South	935,700	6,076,577	592,992	1,933,592	273,163	3,276,830
Montana	38,900	294,169	4,085	--	153,852	136,232
Idaho	68,300	258,954	4,367	--	68,910	185,677
Wyoming	2,800	55,183	2,337	--	5,748	47,098
Colorado	6,100	210,197	22,091	--	34,594	153,512
New Mexico	10,300	99,105	1,557	59,549	1,491	36,508
Arizona	10,700	276,541	856	166,853	561	108,271
Utah	2,400	74,353	3,420	--	11,798	59,135
Nevada	1,400	14,970	276	590	606	13,498
Mountain	140,900	1,283,472	38,989	226,992	277,560	739,931
Washington	270,700	394,883	3,819	--	149,069	241,995
Oregon	552,700	210,017	2,706	--	55,250	152,061
California	266,900	1,566,908	14,126	277,119	18,909	1,256,754
Pacific	1,090,300	2,171,808	20,651	277,119	223,228	1,650,810
Total West	1,231,200	3,455,280	59,640	504,111	500,788	2,390,741
Total United States	2,515,000	18,889,927	4,287,083	2,514,723	1,939,861	10,148,260

[1] Value of logs and bolts, Christmas trees, pine gum and maple sap at local points of delivery.
[2] Includes the value of 79 crops harvested. See 1956 Agricultural Statistics, page 441 for list of crops included.
[3] Less than 500 dollars.

Source: Forest Service and Agricultural Marketing Service, U. S. Department of Agriculture

TABLE 2.--Estimated production, net imports, and new supply of industrial roundwood[1] (fuelwood excluded) in the United States, 1900-1958

(Million cubic feet)

Year	Total			Saw logs			Veneer logs			Pulpwood			Other products[2]
	Domestic production	Net imports	New supply[3]	Domestic production	Net imports[4]	New supply[3] [5]	Domestic production	Net imports[6]	New supply[3]	Domestic production	Net imports[7]	New supply[3] [8]	New supply
1900.....	7,285	* 140	7,140	5,680	* 175	5,505	5	--	5	135	35	170	1,460
1901.....	7,580	* 110	7,470	5,930	* 150	5,780	5	--	5	150	40	190	1,490
1902.....	7,880	* 60	7,820	6,180	* 110	6,070	10	--	10	160	50	210	1,525
1903.....	8,215	* 140	8,075	6,445	* 195	6,255	15	--	15	175	55	230	1,575
1904.....	8,490	* 150	8,340	6,675	* 205	6,470	20	--	20	190	60	250	1,600
1905.....	8,625	* 90	8,535	6,755	* 155	6,600	35	--	35	195	65	260	1,640
1906.....	9,225	* 95	9,130	7,145	* 170	6,975	60	--	60	225	75	300	1,800
1907.....	9,555	* 115	9,440	7,145	* 215	6,930	65	--	65	235	100	335	2,110
1908.....	8,725	* 80	8,645	6,520	* 160	6,360	70	--	70	205	80	285	1,930
1909.....	9,290	* 50	9,240	6,910	* 155	6,760	80	--	80	245	105	350	2,050
1910.....	9,315	* 80	9,235	6,910	* 215	6,695	90	--	90	240	135	375	2,075
1911.....	9,040	* 150	8,890	6,680	* 290	6,385	80	--	80	260	140	400	2,020
1912.....	9,350	* 145	9,205	6,990	* 295	6,695	80	--	80	270	150	415	2,015
1913.....	9,185	* 165	9,020	6,835	* 320	6,510	80	--	80	275	155	430	1,995
1914.....	8,580	* 15	8,565	6,290	* 185	6,110	85	--	85	280	170	450	1,925
1915.....	8,035	130	8,165	9,750	* 35	5,715	85	--	85	315	170	480	1,885
1916.....	8,545	165	8,710	6,185	* 10	6,175	90	--	90	340	175	515	1,930
1917.....	7,955	170	8,125	5,570	5	5,575	90	--	90	360	165	530	1,930
1918.....	7,320	180	7,500	4,955	20	4,975	95	--	95	345	160	510	1,920
1919.....	7,735	125	7,860	5,370	* 55	5,315	105	--	105	340	180	520	1,915
1920.....	7,800	195	7,995	5,440	* 55	5,380	80	--	80	385	250	640	1,890
1921.....	6,585	145	6,735	4,505	* 80	4,430	75	--	75	290	225	515	1,720
1922.....	7,610	295	7,900	5,480	* 60	5,420	90	--	90	345	355	700	1,695
1923.....	8,550	340	8,890	6,375	* 75	6,295	115	--	115	355	415	770	1,705
1924.....	8,270	270	8,545	6,140	* 155	5,980	115	--	115	365	425	790	1,655
1925.....	8,390	330	8,720	6,375	* 120	6,255	135	--	135	385	450	835	1,495
1926.....	8,235	370	8,610	6,180	* 145	6,035	145	--	145	425	515	940	1,490
1927.....	7,825	315	8,140	5,790	* 205	5,585	175	[9](*)	170	425	520	945	1,435
1928.....	7,720	280	8,000	5,710	* 275	5,435	175	* 5	175	445	555	1,005	1,385
1929.....	8,090	325	8,415	6,020	* 255	5,765	200	* 5	195	495	585	1,080	1,380
1930.....	6,385	375	6,755	4,560	* 175	4,385	155	* 5	150	470	555	1,025	1,195
1931.....	4,665	325	4,990	3,105	* 150	2,960	125	* 5	120	460	475	935	970
1932.....	3,425	315	3,740	2,100	* 120	1,980	120	[9](*)	115	375	435	815	830
1933.....	4,080	345	4,425	2,665	* 145	2,520	125	* 5	120	460	490	950	835
1934.....	4,370	345	4,710	2,925	* 165	2,760	130	* 5	125	460	510	975	855
1935.....	5,115	425	5,740	3,565	* 135	3,630	145	* 5	140	505	565	1,070	895
1936.....	6,015	560	6,370	4,295	* 95	3,995	165	* 5	160	580	660	1,240	975
1937.....	6,410	610	6,645	4,505	* 115	4,015	195	* 5	195	685	730	1,415	1,020
1938.....	5,585	475	5,950	3,860	* 70	3,680	195	[9](*)	195	610	540	1,155	920
1939.....	6,395	535	6,930	4,470	* 60	4,410	210	[9](*)	210	750	595	1,345	965
1940.....	6,990	400	7,925	4,845	* 35	5,340	235	* 5	230	950	440	1,390	965
1941.....	8,060	650	8,570	5,680	105	5,630	265	* 5	260	1,085	550	1,655	1,030
1942.....	8,090	720	9,840	5,645	170	6,830	305	* 5	300	1,140	555	1,715	1,000
1943.....	7,565	575	8,775	5,325	85	6,020	280	* 15	265	1,035	505	1,570	920
1944.....	7,460	560	8,170	5,115	100	5,385	270	* 10	260	1,170	470	1,620	905
1945.....	6,615	680	7,570	4,365	100	4,745	250	* 10	240	1,150	590	1,740	845
1946.....	7,720	810	8,255	5,295	90	5,200	255	* 5	250	1,275	720	1,910	890
1947.....	8,100	815	8,615	5,500	* 5	5,260	275	* 5	265	1,385	825	2,145	940
1948.....	8,380	1,080	9,075	5,750	190	5,645	290	[9]	295	1,490	885	2,290	850
1949.....	7,355	935	8,550	5,000	140	5,345	320	[9]	320	1,290	790	2,135	745
1950.....	8,535	1,385	9,975	5,905	455	6,330	345	10	350	1,510	925	2,520	770
1951.....	8,745	1,205	9,730	5,780	235	5,895	395	10	405	1,845	955	2,705	730
1952.....	8,750	1,160	9,890	5,820	275	6,140	420	10	430	1,810	875	2,620	700
1953.....	8,825	1,225	9,945	5,710	330	5,915	475	20	500	1,885	870	2,780	750
1954.....	8,770	1,195	10,080	5,650	365	6,070	490	35	520	1,890	795	2,750	740
1955.....	9,355	1,295	10,705	5,810	430	6,250	575	45	625	2,190	820	3,050	780
1956[10].....	9,645	1,375	10,770	5,860	420	6,135	580	50	630	2,475	905	3,275	730
1957[10].....	8,825	1,190	10,060	5,220	335	5,630	555	55	610	2,370	800	3,140	680
1958[10].....	8,640	1,205	9,855	5,125	350	5,445	580	60	640	2,270	795	3,105	665

[1] Includes all products, except fuelwood, commonly cut from round sections of trees.
[2] Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts and a miscellaneous assortment of similar items.
[3] Columns may not add to total because of rounding.
[4] Net imports of lumber converted to cubic feet roundwood. Small quantities of imported saw logs (roundwood form) are included under domestic production.
[5] Includes changes in stocks beginning in 1935.
[6] Net imports of veneer logs represent the equivalent net imports of veneer and plywood converted to board-feet log scale, and then to cubic feet roundwood. The small volume of veneer logs imported (roundwood form) are included under domestic production.
[7] Includes net pulpwood imports (in roundwood form) and the pulpwood equivalent of the net woodpulp and paper and paperboard imports.
[8] Includes changes in stocks beginning in 1941.
[9] Less than 2.5 million cubic feet.
[10] Preliminary. Subject to revision.

* Net imports.

Source: Based on data published by the Department of Commerce and Agriculture and estimates of the Forest Service.

TABLE 3.--Stumpage prices for selected species, 1910-58

(Dollars per thousand board-feet)

Year and quarter	Douglas-fir[1]	Southern-Pine[2]	Sugar pine[3]	Ponderosa Pine[3]
1910	2.20	1.50	4.30	3.60
1911	2.30	2.80	2.50	2.50
1912	2.30	1.50	3.50	2.70
1913	1.70	1.70	3.30	2.20
1914	1.60	2.90	3.00	2.00
1915	2.90	2.10	3.40	2.50
1916	1.20	3.20	3.50	2.90
1917	1.60	3.40	2.80	2.20
1918	1.80	3.00	3.40	2.70
1919	2.40	3.70	3.40	3.00
1920	1.80	4.40	5.00	3.70
1921	1.90	3.70	4.20	3.20
1922	2.50	2.80	3.80	4.00
1923	2.50	3.00	4.40	3.90
1924	2.20	3.50	4.20	3.50
1925	2.10	3.20	4.40	3.60
1926	2.20	3.60	4.50	3.70
1927	2.50	3.50	4.00	3.40
1928	2.90	3.60	3.20	2.50
1929	2.70	3.50	4.60	3.60
1930	3.30	3.20	6.30	3.60
1931	2.90	3.40	4.60	4.20
1932	1.70	2.80	3.70	2.60
1933	1.20	2.70	--	--
1934	1.50	2.90	3.50	2.50
1935	1.70	4.50	3.10	2.40
1936	2.10	--	2.80	2.20
1937	1.60	5.30	2.80	2.20
1938	2.50	7.30	3.50	2.50
1939	--	5.80	3.10	2.40
1940	2.30	4.50	3.00	2.20
1941	3.60	10.80	3.40	2.60
1942	--	8.90	4.80	2.70
1943	--	8.70	4.20	5.00
1944	5.20	10.90	5.20	4.00
1945	5.00	9.30	7.30	5.60
1946	6.60	8.90	7.20	5.80
1947	9.90	10.90	12.50	8.30
1948	19.90	16.40	16.20	14.60
1949	11.10	19.70	18.90	17.60
1950	16.40	26.70	25.00	18.30
1951	25.40	34.60	40.40	33.60
1952	25.80	38.50	36.40	27.40
1953	20.20	34.20	30.20	25.90
1954	16.20	29.70	31.20	27.20
1955	28.90	32.00	30.00	26.10
1956	37.70	37.40	34.90	27.20
1957 - 1st quarter	33.80	32.30	34.70	31.60
2nd quarter	28.40	32.00	35.90	21.80
3rd quarter	25.30	30.30	28.40	21.30
4th quarter	23.10	30.70	25.90	25.30
1958 - 1st quarter	21.50	30.30	25.00	22.60
2nd quarter	20.60	30.65	18.30	19.40

[1] 1910-31 National Forest timber sales, all species Washington and Oregon; 1932-41 all species western Washington and western Oregon; 1944-56, National Forest and Bureau of Land Management sales Douglas-fir only in western Washington and western Oregon; 1957-58 National Forest sales, Douglas-fir only in western Washington and western Oregon. All U.S. Forest Service National Forest prices in this table are the bid prices for timber sold on a Scribner C log scale basis, including Knutsen-Vandenberg Act deposits for stand improvement but excluding cooperative deposits and slash-disposal payments.

[2] 1910-34 stumpage prices of privately owned second-growth southern pine timber, 1935-49 National Forest timber sales all species; 1950-58 National Forest timber sales pine only.

[3] 1910-58 National Forest timber sales, California.

TABLE 4.--Lumber production, imports, exports, and consumption in the United States, for selected years 1899-1958

Year	Domestic production	Imports	Exports	Stock changes	Apparent consumption	Per capita consumption
	Billion board-feet	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Board-feet*
1899	35.1	0.7	1.5	--	34.3	458
1905	43.5	.8	1.8	--	42.5	507
1910	44.5	1.0	2.3	--	43.2	468
1915	37.0	1.1	1.3	--	36.8	366
1920	35.0	1.4	1.7	--	34.7	326
1925	41.0	1.8	2.6	--	40.2	347
1930	29.4	1.2	2.4	--	28.2	229
1931	20.0	.7	1.7	--	19.0	153
1932	13.5	.4	1.2	--	12.7	102
1933	17.2	.4	1.3	--	16.3	130
1934	18.8	.3	1.3	--	17.8	141
1935	22.9	.4	1.3	-1.3	23.3	183
1936	27.6	.7	1.3	1.3	25.7	201
1937	29.0	.7	1.4	2.4	25.9	201
1938	24.8	.5	1.0	.7	23.6	182
1939	28.8	.7	1.1	--	28.4	217
1940	31.2	.7	1.0	-3.4	34.3	260
1941	36.5	1.4	.7	1.0	36.2	271
1942	36.3	1.5	.5	-6.5	43.8	325
1943	34.3	.9	.3	-3.9	38.8	284
1944	32.9	1.0	.4	-1.1	34.6	250
1945	28.1	1.1	.4	-1.8	30.6	219
1946	34.1	1.2	.6	1.2	33.5	237
1947	35.4	1.3	1.4	1.5	33.8	235
1948	37.0	1.9	.6	1.9	36.4	248
1949	32.2	1.6	.7	-1.3	34.4	231
1950	38.0	3.4	.5	.2	40.7	268
1951	37.2	2.5	1.0	.8	37.9	245
1952	37.5	2.5	.7	-.3	39.6	252
1953	36.7	2.8	.6	.8	38.1	239
1954	36.4	3.1	.7	-.4	39.2	241
1955	37.4	3.6	.8	-.1	40.3	244
1956	37.7	3.4	.8	.9	39.4	234
1957[1]	33.6	3.0	.8	-.5	36.3	212
1958[1]	33.0	3.0	.8	.2	35.0	201

[1] Preliminary. Subject to revision.

Source: Bureau of the Census, U. S. Department of Commerce (24); Forest Service, U. S. Department of Agriculture

Note. Estimates of lumber production in 1957 and 1958 are based on data published by the National Lumber Manufacturers Association (9, 10).

TABLE 5.--Estimated lumber production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1958[1]

Year	All regions			North			South			West, total[2]
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
	Billion board-feet	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*	*Billion board-feet*
1899	35.1	8.9	26.2	18.6	6.6	12.0	12.9	2.3	10.7	3.5
1905	43.5	10.5	33.0	20.1	7.3	12.8	16.5	3.3	13.3	6.9
1910	44.5	10.5	34.0	15.6	7.5	8.0	20.0	2.9	17.1	8.9
1915	37.0	7.5	29.5	10.0	4.7	5.3	18.8	2.8	16.0	8.2
1920	35.0	7.4	27.6	6.9	3.8	3.0	16.0	3.5	12.5	12.1
1925	41.0	7.7	33.3	6.0	3.6	2.5	19.6	4.1	15.5	15.3
1930	29.4	6.1	23.2	4.5	2.9	1.6	12.6	3.2	9.4	12.2
1935	22.9	4.7	18.2	3.8	2.4	1.5	10.0	2.3	7.7	9.1
1940	31.2	5.5	25.6	4.6	2.9	1.7	13.3	2.6	10.7	13.2
1941	36.5	6.7	29.9	5.3	3.3	2.0	15.5	3.3	12.2	15.7
1942	36.3	6.8	29.5	5.1	3.2	2.0	15.6	3.6	12.0	15.6
1943	34.3	7.4	26.9	4.9	3.2	1.7	14.3	4.2	10.2	15.0
1944	32.9	7.8	25.2	5.4	3.5	1.9	12.6	4.3	8.3	15.0
1945	28.1	7.0	21.1	4.5	2.8	1.7	11.5	4.1	7.4	12.1
1946	34.1	8.3	25.9	4.9	3.1	1.9	14.7	5.1	9.6	14.4
1947	35.4	7.4	28.0	5.4	3.4	2.0	13.6	4.0	9.6	16.3
1948	37.0	7.4	29.6	6.0	3.4	2.6	13.2	4.0	9.2	17.8
1949	32.2	5.7	26.5	4.1	2.6	1.5	11.6	3.1	8.5	16.5
1950	38.0	7.4	30.6	4.9	3.0	2.0	14.6	4.4	10.2	18.6
1951	37.2	7.7	29.5	5.0	3.3	1.7	13.3	4.4	8.9	18.9
1952	37.5	7.2	30.3	4.1	2.7	1.4	13.7	4.5	9.2	19.7
1953	36.7	7.2	29.5	5.0	3.5	1.5	11.8	3.7	8.1	19.9
1954	36.4	7.1	29.3	4.6	3.0	1.7	11.7	4.1	7.7	20.0
1955	37.4	7.6	29.8	4.5	3.1	1.5	12.1	4.5	7.7	20.7
1956	37.7	7.8	29.9	4.9	3.2	1.7	12.4	4.5	7.8	20.5
1957[3]	33.6	7.1	26.5	4.5	3.0	1.5	11.0	4.1	6.9	18.1
1958[3]	33.0	6.9	26.1	4.4	2.9	1.5	10.8	4.0	6.8	17.8

[1] Data may not add to total because of rounding.
[2] Practically all softwoods.
[3] Preliminary. Subject to revision.

Source: Bureau of the Census, U. S. Department of Commerce (24); Forest Service, U. S. Department of Agriculture.

Note. Estimates for 1957 and 1958 are based on data published by the National Lumber Manufacturers Association (9, 10).

TABLE 6.--Wholesale price indexes for lumber, all commodities and selected construction materials 1951-58

(1947-49 = 100)

Year and Month	Lumber	Structural steel	Paperboard	Structural clay products	Construction materials	All commodities	Plywood
1951	123.6	128.4	131.8	121.4	119.6	114.8	115.1
January	125.6	128.4	132.0	131.3	120.2	115.0	117.4
February	126.4	128.4	132.0	121.4	120.7	116.5	117.7
March	126.7	128.4	132.0	121.4	120.8	116.5	117.7
April	126.7	128.4	132.0	121.4	120.9	116.3	117.7
May	126.0	128.4	132.0	121.4	120.7	115.9	117.7
June	124.2	128.4	132.0	121.4	120.0	115.1	117.7
July	123.0	128.4	132.0	121.4	119.4	114.2	116.9
August	121.7	128.4	132.0	121.4	118.9	113.7	116.9
September	120.9	128.4	132.0	121.4	118.7	113.4	114.8
October	121.1	128.4	131.7	121.4	118.7	113.7	114.3
November	120.8	128.4	131.5	121.4	118.5	113.6	109.4
December	120.4	128.4	130.9	121.4	118.0	113.5	102.8
1952	120.5	131.1	127.4	122.0	118.2	111.6	105.0
January	120.4	128.4	130.6	121.4	117.8	113.0	104.2
February	120.6	128.4	130.3	121.4	117.9	112.5	104.8
March	120.7	128.4	130.3	121.4	118.0	112.3	105.6
April	121.3	128.4	130.3	121.3	118.2	111.8	105.6
May	121.1	128.4	129.8	121.4	118.1	111.6	105.6
June	120.1	128.4	129.3	121.4	117.8	111.2	105.7
July	120.4	128.4	125.4	121.3	118.0	111.8	105.8
August	120.6	134.9	124.6	121.3	118.6	112.2	106.0
September	120.6	134.9	124.6	121.3	118.7	111.8	106.0
October	120.2	134.9	124.6	124.0	118.6	111.1	106.1
November	120.0	134.9	124.8	124.0	118.4	110.7	102.3
December	119.8	134.9	124.4	124.0	118.3	109.6	102.3
1953	119.3	138.2	124.3	128.1	119.9	110.1	109.3
January	120.1	134.9	124.2	124.0	118.5	109.9	108.5
February	120.3	134.9	123.5	124.0	118.7	109.6	110.9
March	120.9	134.9	123.4	124.3	119.2	110.0	112.0
April	121.5	134.9	123.1	124.6	119.9	109.4	112.0
May	121.0	133.8	123.1	124.7	120.2	109.8	112.4
June	120.7	133.8	123.2	125.1	120.5	109.5	112.4
July	120.2	141.9	123.7	131.1	121.3	110.9	112.7
August	119.3	141.9	123.6	131.4	120.8	110.6	112.4
September	118.3	141.9	126.0	132.0	120.4	111.0	106.8
October	117.2	141.9	126.2	132.0	120.0	110.2	104.7
November	116.3	141.9	126.0	132.1	119.5	109.8	103.1
December	116.4	141.9	125.9	132.1	119.6	110.1	103.9
1954	117.3	143.8	124.5	133.1	120.2	110.3	103.1
January	115.9	141.9	125.5	131.9	119.6	110.9	103.5
February	115.5	141.3	125.1	131.9	119.2	110.5	105.0
March	115.6	141.3	124.6	132.0	119.3	110.5	102.9
April	115.3	141.3	124.8	132.0	119.0	111.0	100.7
May	115.0	141.3	124.4	132.0	118.6	110.9	101.4
June	115.5	141.3	124.2	132.0	118.5	110.0	99.7
July	118.6	146.2	124.2	132.0	120.5	110.4	103.0
August	118.7	146.2	124.2	132.3	120.8	110.5	105.4
September	119.0	146.2	124.2	135.4	121.3	110.0	103.2
October	119.5	146.2	124.2	135.4	121.7	109.7	104.3
November	119.6	146.2	124.1	135.4	121.9	110.0	104.3
December	119.8	146.2	124.1	135.4	122.0	109.5	104.3
1955	124.4	151.9	127.1	140.1	125.5	110.7	105.4
January	120.0	146.2	124.0	135.8	122.1	110.1	104.7
February	121.4	146.2	124.0	136.1	122.5	110.4	104.8
March	121.8	146.2	125.7	136.5	122.8	110.0	104.8
April	122.9	146.2	126.0	136.8	123.4	110.5	104.8
May	124.2	146.2	126.0	137.0	124.1	109.9	105.6
June	124.7	146.2	126.0	137.3	124.1	110.3	105.6
July	125.1	157.5	126.1	141.3	125.7	110.5	105.7
August	126.4	157.5	128.0	142.9	127.4	110.9	105.7
September	127.1	157.5	129.5	143.9	128.5	111.7	106.1
October	126.8	157.5	129.7	144.3	128.7	111.6	106.1
November	126.4	157.5	130.1	144.5	128.1	111.2	105.9
December	126.4	157.5	130.3	144.6	128.3	111.3	105.7

TABLE 6.--Wholesale price indexes for lumber, all commodities and selected construction materials 1951-1958--Continued

Year and Month	Lumber	Structural steel	Paperboard	Structural clay products	Construction materials	All commodities	Plywood
1956	127.2	162.9	134.8	148.0	130.6	114.3	101.7
January	127.6	157.5	130.7	145.3	129.4	111.9	107.5
February	128.2	157.5	130.7	145.6	129.6	112.4	107.5
March	129.9	157.5	130.6	145.9	130.5	112.8	107.5
April	130.6	157.5	134.5	146.0	131.2	113.6	106.9
May	130.4	157.5	136.4	146.1	130.8	114.4	102.7
June	129.6	157.5	136.5	146.5	130.6	114.2	101.0
July	128.5	157.5	136.5	149.3	130.6	114.0	103.3
August	127.1	170.5	136.4	150.1	131.5	114.7	99.2
September	125.2	170.5	136.3	150.1	131.0	115.5	99.2
October	123.6	170.5	136.3	150.1	131.0	115.6	96.1
November	123.1	170.5	136.2	150.3	130.8	115.9	94.8
December	122.4	170.5	136.2	150.4	130.5	116.3	94.6
1957	119.7	187.5	136.3	154.0	130.6	117.6	96.4
January	122.6	179.1	136.2	150.6	130.5	116.9	97.1
February	121.9	183.4	136.2	150.7	130.5	117.0	96.4
March	121.2	183.4	136.2	150.8	130.5	116.9	96.2
April	121.2	183.4	136.2	155.0	130.7	117.2	96.7
May	120.6	183.4	136.2	155.0	130.7	117.1	96.8
June	120.4	183.4	136.2	155.1	130.7	117.4	97.7
July	120.0	192.3	136.2	155.1	131.4	118.2	96.9
August	119.4	192.3	136.2	155.0	131.2	118.4	95.2
September	118.3	192.3	136.2	155.0	130.9	118.0	94.7
October	117.5	192.3	136.6	155.1	130.2	117.8	96.9
November	117.1	192.3	136.6	155.1	130.1	118.1	96.4
December	116.4	193.3	136.6	155.1	130.1	118.5	95.6
1958							
January	116.5	192.3	136.4	155.3	130.3	118.8	95.6
February	116.3	192.3	136.4	155.3	130.1	119.0	93.7
March	115.9	192.3	136.2	155.5	129.4	119.7	92.9
April	115.9	192.3	136.1	155.5	129.0	119.3	94.4
May	116.7	192.3	136.0	155.6	129.2	119.5	92.2
June	116.8	192.3	136.0	155.6	129.5	119.2	94.9
July	116.7	192.3	136.0	155.6	129.6	119.2	98.3
August[1]	118.7	199.6	136.0	155.6	130.6	119.1	99.4

[1] Preliminary

Source: Bureau of Labor Statistics, U. S. Department of Labor (29).

TABLE 7.--Estimated pulpwood production in the United States, by regions and by hardwoods and softwoods, selected years 1899-1958[1]

Year	All regions			North			South			West, total[2]
	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	Total	Hardwoods	Softwoods	
	Million cords	*Million cords*	*Million cords*	*Million cords*	*Million cords*	*Million cords*	*Million cords*	*Million cords*	*Million cords*	*Million cords*
1899	1.6	0.5	1.2	1.4	0.5	1.0	--	--	--	0.2
1905	2.5	.4	2.1	2.5	.4	2.1	0.1	--	0.1	--
1910	3.1	.8	2.3	2.8	.7	2.1	.3	0.1	.1	.1
1916	4.4	.7	3.7	4.2	.6	3.6	.2	.2	.1	--
1920	5.0	.8	4.3	4.5	.5	4.0	.4	.3	.1	.2
1925	5.0	.7	4.3	4.1	.4	3.7	.6	.3	.3	.3
1930	6.1	.8	5.3	3.9	.4	3.5	1.0	.4	.5	1.2
1935	6.6	.9	5.7	2.9	.3	2.6	1.4	.6	.9	2.2
1941	14.2	1.8	12.3	4.4	1.1	3.3	7.2	.7	6.4	2.6
1942	14.9	1.9	13.0	5.0	1.2	3.8	7.3	.7	6.6	2.6
1943	13.6	1.8	11.8	4.0	1.1	2.9	7.1	.7	6.5	2.5
1944	15.3	2.0	13.4	4.6	1.0	3.5	8.2	1.0	7.2	2.6
1945	15.3	2.2	13.1	4.7	1.1	3.6	8.1	1.1	7.0	2.5
1946	17.0	2.6	14.4	5.6	1.4	4.2	8.8	1.2	7.6	2.6
1947	18.5	2.5	16.0	5.6	1.3	4.3	9.3	1.2	8.1	3.6
1948	20.0	2.5	17.5	5.4	1.2	4.2	11.4	1.3	10.1	3.3
1949	17.6	2.3	15.3	4.6	1.3	3.3	9.9	1.0	8.9	3.1
1950	20.7	2.9	17.8	5.0	1.7	3.3	12.4	1.2	11.2	3.3
1951	25.1	3.8	21.3	6.3	2.2	4.1	14.1	1.6	12.5	4.7
1952	25.1	3.7	21.4	6.0	1.9	4.1	14.6	1.8	12.8	4.5
1953	26.3	4.2	22.1	5.4	2.2	3.2	16.2	2.0	14.2	4.7
1954	27.0	4.8	22.2	5.5	2.6	2.9	16.4	2.2	14.2	5.1
1955	30.9	5.3	25.6	6.3	2.7	3.6	18.4	2.6	15.8	6.2
1956	35.2	6.1	29.1	7.3	3.2	4.1	20.3	2.9	17.4	7.6
1957	34.4	6.2	28.2	7.2	3.2	4.0	19.8	3.0	16.8	7.4
1958[3]	33.5	6.0	27.5	7.1	3.2	3.9	19.2	2.8	16.4	7.2

[1] Data may not add to totals because of rounding.
[2] Practically all softwoods.
[3] Preliminary. Subject to revision.

Source: Bureau of the Census, U. S. Department of Commerce (25); Forest Service, U. S. Department of Agriculture (20).

TABLE 8.--Pulpwood prices at local delivery points, 1933-58

(Dollars per standard cord, including bark)

Year	Southern pine[1]	Lake States spruce[2]
1933	--	7.75
1934	--	7.25
1935	--	7.75
1936	--	7.50
1937	--	9.75
1938	3.60	8.50
1939	3.90	9.00
1940	4.20	9.00
1941	4.60	10.50
1942	6.00	12.25
1943	7.20	14.75
1944	8.20	15.00
1945	8.40	15.00
1946	10.10	16.50
1947	11.00	23.75
1948	11.70	22.25
1949	11.00	18.50
1950	11.90	19.50
1951	13.80	22.50
1952	13.90	26.50
1953	13.90	24.75
1954	14.00	24.75
1955	14.40	24.75
1956	15.40	26.75
1957	15.50	27.25
1958	15.90	27.25

[1] Source: Forest Service, U. S. Department of Agriculture.
[2] Source: University of Wisconsin Extension Forestry Office (33).

TABLE 9.--Production[1] of veneer logs and bolts in the United States, selected years, 1905-1958

(Million board-feet, log scale)

Year	All species	Softwood	Hardwood
1905	181	13	168
1906	329	52	277
1907	349	39	310
1908	383	51	332
1909	436	56	380
1910	477	49	428
1911	445	51	394
1919	577	93	484
1921	400	70	330
1923	646	151	495
1925	735	194	541
1927	962	290	672
1929	1,113	394	719
1931	696	228	468
1933	700	282	418
1935	824	340	484
1937	1,114	460	654
1939	1,194	544	650
1942	1,736	797	939
1943	1,594	659	935
1944	1,533	647	886
1945	1,404	546	858
1947	1,570	751	819
1951	2,271	1,232	1,039
1952	2,467	1,548	919
1953	2,815	1,861	954
1954	2,894	1,978	916
1955	3,433	2,431	1,002
1956	[2] 3,444	2,493	[2] 951
1957	[2] 3,307	2,455	[2] 852
1958	[2] 3,475	[2] 2,575	[2] 900

[1] Includes small volumes of imported logs.
[2] Preliminary, subject to revision.

Source: U. S. Department of Commerce, Bureau of the Census (22, 23); U. S. Department of Agriculture, Forest Service.

TABLE 10.--Supplies, requirements, and prices, rosin and turpentine by types, selected crop years beginning April 1, 1949 through 1958

(520-lb. drums)

Crop year beginning April 1	Commodity and type	Supply				Requirements			Carry-out stocks[1]	Average price per 100# net[6]
		Carry-in stocks[1]	Production	Imports	Total supply	Domestic	Export	Total		
	ROSIN (520 lb. Drums)									*Dollars*
1949	Gum	477,570	924,900	4,229	1,406,699	347,152	256,927	604,079	802,620	6.47
	S. D. wood	140,660	1,098,610	-0-	1,239,270	842,512	305,098	1,147,610	91,660	--
	Tall oil (est.)	-0-	4,000	-0-	4,000	-0-	-0-	-0-	4,000	--
	Total	618,230	2,027,510	4,229	2,649,969	1,189,664	562,025	1,751,689	898,280	--
1950	Gum	802,620	797,620	4,475	1,604,715	550,584	595,591	1,146,175	458,540	6.31
	S. D. wood	91,660	1,339,410	-0-	1,431,070	985,348	345,682	1,331,030	100,040	--
	Tall oil (est.)	4,000	35,000	-0-	39,000	37,000	(4)	37,000	2,000	--
	Total	898,280	2,172,030	4,475	3,074,785	1,572,932	941,273	2,514,205	560,580	--
1951	Gum	458,540	716,350	1,980	1,176,870	392,190	293,140	685,330	491,540	8.73
	S. D. wood	100,040	1,333,040	-0-	1,433,080	923,479	278,561	1,202,040	231,040	--
	Tall oil (est.)	2,000	35,000	-0-	37,000	30,000	(4)	30,000	7,000	--
	Total	560,580	2,084,390	1,980	2,646,950	1,345,669	571,701	1,917,370	729,580	--
1952	Gum	491,540	638,360	3,000	1,132,900	312,563	138,577	451,140	681,760	7.53
	S. D. wood	231,040	1,082,530	-0-	1,313,570	917,178	218,062	1,135,240	178,330	--
	Tall oil (est.)	7,000	30,000	-0-	37,000	31,000	(4)	31,000	6,000	--
	Total	729,580	1,750,890	3,000	2,483,470	1,260,741	356,639	1,617,380	866,090	--
1953	Gum	681,760	531,620	1,410	1,214,790	348,050	132,100	480,150	734,640	7.72
	S. D. wood	178,330	1,213,340	-0-	1,391,670	913,880	384,350	1,298,230	93,440	--
	Tall oil (est.)	6,000	35,000	-0-	41,000	37,000	(4)	37,000	4,000	--
	Total	866,090	1,779,960	1,410	2,647,460	1,298,930	516,450	1,815,380	832,080	--
1954	Gum	734,640	527,700	390	1,262,730	345,220	208,840	554,060	708,670	7.91
	S. D. wood	93,440	1,342,370	-0-	1,435,810	887,420	458,470	1,345,890	89,920	--
	Tall oil (est.)	4,000	50,000	-0-	54,000	49,000	(4)	49,000	5,000	--
	Total	832,080	1,920,070	390	2,752,540	1,281,640	667,310	1,948,950	803,590	--
1955	Gum	708,670	452,970	650	1,162,290	406,689	151,091	557,780	604,510	8.45
	S. D. wood	89,920	1,369,440	-0-	1,459,360	945,892	400,598	1,346,490	112,870	--
	Tall oil (est.)	5,000	125,000	-0-	130,000	115,000	(4)	115,000	15,000	--
	Total	803,590	1,947,410	650	2,751,650	1,467,581	551,689	2,019,270	732,380	--
1956	Gum	604,510	444,590	650	1,049,750	347,450	136,050	483,500	566,250	8.37
	S. D. wood	112,870	1,324,220	-0-	1,437,090	875,260	467,960	1,343,220	93,870	--
	Tall oil (est.)	15,000	225,000	-0-	240,000	210,000	(4)	210,000	30,000	--
	Total	732,380	1,993,810	650	2,726,840	1,432,710	604,010	2,036,720	690,120	--
1957	Gum	566,250	399,910	270	966,430	283,510	123,470	406,980	559,450	7.90
	S. D. wood	93,870	1,195,990	-0-	1,289,860	798,230	420,890	1,219,120	70,740	--
	Tall oil (est.)	30,000	269,270	-0-	299,270	259,210	(4)	259,210	40,060	--
	Total	690,120	1,865,170	270	2,555,560	1,340,950	544,360	1,885,310	670,250	--
1958 (est.)	Gum	559,000	370,000	1,000	[5] 930,000	280,000	100,000	380,000	550,000	8.20
	S. D. wood	71,000	1,175,000	-0-	1,246,000	821,000	355,000	1,176,000	70,000	--
	Tall oil	40,000	285,000	-0-	325,000	235,000	50,000	285,000	40,000	--
	Total	670,000	1,830,000	1,000	2,501,000	1,336,000	505,000	1,841,000	660,000	--
	TURPENTINE (50 gallon barrels)									
1949	Gum	127,130	323,010	14,170	464,310	240,380	99,270	339,650	124,660	.384
	Wood (total)	102,560	350,280	-0-	452,840	315,256	56,284	371,540	81,300	--
	S. D.	(2)	199,630	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate	(2)	147,500	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.	(2)	3,150	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total	229,690	673,290	14,170	917,150	555,636	155,554	711,190	205,960	--
1950	Gum	124,660	271,880	16,771	413,311	239,940	137,771	377,711	35,600	.551
	Wood (total)	81,300	436,670	-0-	517,970	354,117	70,693	424,810	93,160	--
	S. D.	(2)	237,080	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate	(2)	194,180	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.	(2)	5,410	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total	205,960	708,550	16,771	931,281	594,057	208,464	802,521	128,760	--
1951	Gum	35,600	246,460	19,092	301,152	174,571	67,251	241,822	59,330	.763
	Wood (total)	93,160	437,500	-0-	530,660	352,286	43,254	395,540	135,120	--
	S. D.	(2)	229,590	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate	(2)	203,430	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.	(2)	4,480	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total	128,760	683,960	19,092	831,812	526,857	110,505	637,362	194,450	--
1952	Gum	59,330	217,360	19,636	296,326	173,084	43,042	216,126	80,200	.534
	Wood (total)	135,120	347,580	-0-	482,700	294,635	39,115	333,750	148,950	--
	S. D.	(2)	175,090	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate	(2)	169,560	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.	(2)	2,930	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total	194,450	564,940	19,636	779,026	467,719	82,157	549,876	229,150	--

See footnotes at end of table.

TABLE 10.--Supplies, requirements, and prices, rosin and turpentine by types, selected crop years beginning April 1, 1949 through 1958--Continued

Crop year beginning April 1	Commodity and type	Supply				Requirements			Carry-out stocks[1]	Average price per 100# net[6]
		Carry-in stocks[1]	Production	Imports	Total supply	Domestic	Export	Total		
	TURPENTINE (50 gallon barrels)--Continued									*Dollars*
1953.....	Gum.....	80,200	177,680	22,830	280,710	156,500	34,880	191,380	89,330	.516
	Wood (total).....	148,950	360,170	-0-	509,120	348,470	53,070	401,540	107,580	--
	S. D.....	(2)	193,090	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	164,220	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	2,860	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	229,150	537,850	22,830	789,830	504,970	87,950	592,920	196,910	--
1954.....	Gum.....	89,330	175,940	15,360	280,630	145,950	50,240	196,190	84,440	.519
	Wood (total).....	107,580	441,860	-0-	549,440	392,150	65,620	457,770	91,670	--
	S. D.....	(2)	207,700	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	231,750	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	2,410	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	196,910	617,800	15,360	830,070	538,100	115,860	653,960	176,110	--
1955.....	Gum.....	84,440	149,000	18,441	251,881	133,866	45,845	179,711	72,170	.556
	Wood (total).....	91,670	506,540	-0-	598,210	442,581	56,119	498,700	99,510	--
	S. D.....	(2)	201,270	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	302,970	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	2,300	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	176,110	655,540	18,441	850,091	576,447	101,964	678,411	171,680	--
1956.....	Gum.....	72,170	143,830	23,270	239,270	129,440	64,700	194,140	45,130	.555
	Wood (total).....	99,510	501,100	-0-	600,610	430,680	60,450	491,130	109,480	--
	S. D.....	(2)	194,750	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	305,310	-0-	(2)	(2)	(2)	(2)	(2)	--
	D. D.....	(2)	1,040	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	171,680	644,930	23,270	839,880	560,120	125,150	685,270	154,610	--
1957.....	Gum.....	45,130	129,080	14,564	188,774	113,724	32,170	145,894	42,880	.543
	Wood (total).....	109,480	497,740	-0-	607,220	451,710	47,290	499,000	108,220	--
	S. D.[4].....	(2)	185,980	-0-	(2)	(2)	(2)	(2)	(2)	--
	Sulphate.....	(2)	311,760	-0-	(2)	(2)	(2)	(2)	(2)	--
	Total.....	154,610	626,820	14,564	795,994	565,434	79,460	644,894	151,100	--
1958.....	Gum.....	43,000	121,000	18,000	[5] 182,000	113,000	25,000	138,000	44,000	.515
	Wood (total).....	108,000	496,000	-0-	604,000	447,000	50,000	497,000	107,000	--
	S. D.[4].....	83,000	184,000	-0-	267,000	165,000	25,000	190,000	77,000	--
	Sulphate.....	25,000	312,000	-0-	337,000	282,000	25,000	307,000	30,000	--
	Total.....	151,000	617,000	18,000	786,000	560,000	75,000	635,000	151,000	--

[1] Includes CCC loan stocks. These are gross stocks and include rosin and turpentine sold and awaiting shipment.
[2] No breakdown practicable from existing information.
[3] Estimated.
[4] Prior to 1958, exports of tall oil rosin were combined with steam distilled wood rosin exports as reported by the Bureau of the Census. Consequently, the estimated domestic consumption of tall oil rosin necessarily included steam distilled wood rosin to the extent of such tall oil rosin exports.
[5] Includes all types of rosin and turpentine.
[6] Rosin in drums f.o.b. production points; turpentine bulk at production points.
[7] Includes destructively distilled turpentine.

Source: Reports of Agricultural Marketing Service, USDA, and Bureau of the Census, Department of Commerce; records of Commodity Stabilization Service, USDA.

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